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sen, Shila; Sorensen,
Henrik Irgang

ICN NO.	DATE
EP3534	20020619

BG, BR, BY, BZ, CA, CH,
CN, CR, CU, CZ, DE, DK,
DM, DZ, EC, EE, ES, FI,
GB, GD, GE, GH, GM, HR,
HU, ID, IL, IN, IS, JP,
KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV,
MA, MD, MG, MK, MN, MW,
MX, NO, NZ, PL, PT, RO,
RU, SD, SE, SG, SI, SK,
SL, TJ, TM, TR, TT, TZ,
UA, UG, US, UZ, VN, YU,
ZA, ZM, ZW,

AT, BE, CH, CY, DE, DK,
ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA,
GN, GW, ML, MR, NE, SN, TD, TG

tion of mols. expressed at a
cells compared to
ion of cancer-specific
for delivery and expression
The invention furthermore
surface mols. identified by

the methods of the invention. In embodiments of the invention, the targeting complexes comprise the promoters identified by the methods of the invention. In addn. the invention describes methods of identifying binding partners for the cell surface mols. and the binding partners per se. Methods of treatment using the targeting complexes and uses of the targeting complexes for the prepn. of a medicament are also disclosed by the invention. Furthermore, the invention describes uses of the cell surface mols. or fragments thereof for prepn. of vaccines.

ST screening cancer cell surface mol promoter antitumor drug

IT INDEXING IN PROGRESS

IT Glutamate receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(AMPA-binding, agonists/antagonists, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(PCLB; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(PMI-1; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(BRCA1, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Bak, **apoptosis** inducer; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Bax, **apoptosis** inducer; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Bid, **apoptosis** inducer; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Cholecystokinin receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(CCKB; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT CD antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(CD103; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CDKN2A, tumor suppressor; cancer cell cell-surface mol. and

cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(HPNA5, targeting complex; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(PH 94 A; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(PH 94 B; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Dym; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(P53 (deleted in colorectal cancer), tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(MS 114; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(MS 155; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(MS 275; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(MS 400; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(MS 456; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(MS 59; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(MS 79; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(MS 92; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(PCH, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding

partners, and treatment methods)

IT Apolipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(E, peptides, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Cadherins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(E-, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Apolipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(E-, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Apolipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(E-, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Apolipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(E4, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Elk; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Ets; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(FGF, tumor suppressin; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Fgr; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Fes/Fps; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Flg; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Fms; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Fyn; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(GLC 14; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(GLC 16; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(GLC 19; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(GLC 26; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(GLC 28; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(GLC 2; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(GLC 3; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(SPB49; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(SPIA2, targeting complex; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(SPM4, targeting complex; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(SZN8, **apoptosis** inducer; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Genetic methods
(Gene Chip anal.; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ITGAE, targeting complex; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ITGAV, targeting complex; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Toxins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(VCIN; binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(FGF; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Flt; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(L1CAM, recombinant fragments, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(LH18, targeting complex; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(MAB 36 MI; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(MAB H24; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MTS, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MEN-1, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MEN-II, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Met; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Mer; cancer cell cell-surface mol. and cancer-specific promoter

identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
FL: BSU (Biological study, unclassified); BIOL (Biological study) (Met; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Cell adhesion molecules
FL: BSU (Biological study, unclassified); BIOL (Biological study) (L-CAM, NCAM-1, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
FL: BSU (Biological study, unclassified); BIOL (Biological study) (N-ras; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
FL: BSU (Biological study, unclassified); BIOL (Biological study) (NCAM1, targeting complex; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI H417; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI H69; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H82; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H446; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H1048; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H1059; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H1092; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H1105; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods

IT Animal cell line
(NCI-H1184; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H1238; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line

(NCI-H1299; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods

IT Animal cell line
(NCI-H1355; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods;

IT Animal cell line
(NCI-H1395; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods;

IT Animal cell line
(NCI-H1341; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods;

IT Animal cell line
(NCI-H1417; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods

IT Animal cell line
(NCI-H1436; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods;

IT Animal cell line
(NCI-H146; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods;

IT Animal cell line
(NCI-H1522; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods

IT Animal cell line
(NCI-H1648; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods;

IT Animal cell line
(NCI-H1672; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods;

IT Animal cell line
(NCI-H1688; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods;

IT Animal cell line
(NCI-H1694; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods;

IT Animal cell line
(NCI-H1836; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods.

IT Animal cell line
(NCI-H1870; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods

IT Animal cell line
(NCI-H1876; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods

IT Animal cell line
(NCI-H187; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods;

IT Animal cell line
(NCI-H198; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H1[illegible]26; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H1[illegible]; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H1[illegible]3; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H1[illegible]; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H1[illegible]4; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H2[illegible]9; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H2[illegible]9; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H[illegible]6; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H[illegible]; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H[illegible]; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H[illegible]7; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H[illegible]3; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H[illegible]; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H[illegible]41; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H2171; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment

methods)
IT Animal cell line
(NCI-H2195; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H2196; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H2198; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H220; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H226; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H2286; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H2330; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H250; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H345; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H378; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H446; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H460; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H510A; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H524; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H526; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(NCI-H592; cancer cell cell-surface mol. and cancer-specific promoter

identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H60; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H660; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods

IT Animal cell line
(NCI-H711; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H719; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H735; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H740; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H748; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H774; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H82; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods

IT Animal cell line
(NCI-H841; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H847; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H865; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Animal cell line
(NCI-H889; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(NF-1, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(NF-2, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(METXR, targeting complex; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Ned; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(PTCH, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Rim; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Adipose tissue
Adrenal gland
Bladder
Brain
Esophagus
Heart
Kidney
Larynx
Leukocyte
Liver
Lung
Mammary gland
Muscle
Ovary
Pancreas
Placenta
Prostate gland
Salivary gland
Skin
Spinal cord
Spleen
Stomach
Testis
Thymus gland
Thyroid gland
Trachea (anatomical)
Uterus
(DNA from; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT PCR (polymerase chain reaction)
(RT-PCR (reverse transcription-PCR); cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Raf; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Rap-2; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Transcription factors
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Rb, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(RhoA; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(SHP-77; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Animal cell line
(SW 1271; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Shi; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Shi-1; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Shc; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Syn; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(TCBP49 (thioxin-associated calcium-binding protein 49); cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods
IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(TMEFF1; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(TMEFF; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(TNFR-related death receptor 6; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding

partners, and treatment methods)
IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(TNFRSF13; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(TRAIL (tumor necrosis factor-related **apoptosis**-inducing ligand), **apoptosis** inducer; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Genetic element
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(TRE (thyroid hormone-responsive element); cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(TSC2, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Trk; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(VHL, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(WT-1, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Wnt-5a; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Lipoprotein receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(apolipoprotein E, 2; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Fas antigen
Tumor necrosis factors
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**apoptosis** inducer; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Cell cycle
(arrest, protein contributing to; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Astrocyte

(astrocytoma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(atrial natriuretic peptide clearance receptor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Bak, **apoptosis** inducer; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Fibrinogens
Fibronectins
Laminins
Osteopontin
Peptides
Thrombospondins
Vitronectin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Steroid receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(binding site; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bioreactive; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: PCT (Biological study, unclassified); BIOL (Biological study)
(bcl-2; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: PCT (Biological study, unclassified); BIOL (Biological study)
(c-myc; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: PCT (Biological study, unclassified); BIOL (Biological study)
(c-ras; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: PCT (Biological study, unclassified); BIOL (Biological study)
(c-tyr; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Antitumor agents
Brain, neoplasm
Chemotherapy
Combinatorial library
Cytoprotective agents
Cytotoxic agents
Databases

Drug delivery systems
Drug screening
Drug targets
Gene therapy
Human
Immunotherapy
Leukemia
Lung, neoplasm
Melanoma
Neoplasm
Northern blot hybridization
Ovary, neoplasm
Peptide library
Phage display library
Radiotherapy
Surgery
Uterus, neoplasm
(cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Bombesin receptors
Epidermal growth factor receptors
Insulin-like growth factor I receptors
Insulin-like growth factor II receptors
Insulin-like growth factor receptors
Nucleic acids
Promoter (genetic element)
RNA
Silencer (genetic element)
tRNA
mRNA
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Antisense RNA
Cytokines
Glucocorticoids
Hormones, animal
Radionuclides
Ribozymes
Ricin
Toxins
p53 (protein)
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(capsid, viral, endosomal lytic agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Ligands
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cell-surface mol. binding partners; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Post-translational processing
(cell-surface mol. extracellular portion; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes,

binding partners, and treatment methods)

IT Uterus
(cervix, RNA from; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Uterus, neoplasm
(cervix; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Toxins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cholera; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Intestine
(colon, RNA from; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Intestine, neoplasm
(colon; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Intestine, neoplasm
(colorectal; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Neoplasm
(craniopharyngioma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Toxins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(diphtheria; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Brain, neoplasm
(ependymoma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Pseudomonas
(exotoxin; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Toxins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(exotoxins, Pseudomonas; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gene MSH2, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(glial cell line-derived neurotrophic factor .alpha. receptor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT **Neuroglia**

(**glioblastoma**; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Antibodies
PL: BSU (Biological study, unclassified); BIOL (Biological study)
(humanized; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Immunoassay
(immunoblotting; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT **Apoptosis**
(inducers; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Drug delivery systems
(injections, i.v.; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Drug delivery systems
(injections, s.c.; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(insulinoma-assocd. antigen 1; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(int-2; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Biological transport
(internalization; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Genetic element
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(intron; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Glutamate receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(ionotropic glutamate receptor 2; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(lamins, B1; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(large T, SV40, nuclear targeting signal; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Simian virus 40
(large tumor antigen, nuclear targeting signal; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Endosome

(lytic agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Brain, neoplasm
(medulloblastoma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses
(membrane-destabilizing, endosomal lytic agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Meninges
(meningioma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Glutamate receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(metabotropic, 8; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Antibodies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(monoclonal, 12C3, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Bladder
Gamete and Germ cell
Mammary gland
Prostate gland
(neoplasm; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nerve, neoplasm
(neuroblastoma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nerve
(neuron, neuroma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(neuronal pentraxin receptor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Lung, neoplasm
(non-small-cell carcinoma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Histones
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleic acid binding agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Oligodendrocyte
(oligodendroglioma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Peptides
RL: BSU (Biological study, unclassified); BIOL (Biological study)

(oligopeptides, nuclear targeting signal; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(oncogene, and proto-oncogene, antisense RNA or ribozyme targeted against RNA of; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Cyclin dependent kinase inhibitors
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(p16INK4A, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(p53; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(p73, tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Drug delivery systems
(parenterals; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(centraxins, binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Neoplasm
(pineal; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Membranes, biological
(polypeptide destabilizing, endosomal lytic agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prol3; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prol4; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prol4; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prol6; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study) (prob; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study (pro..7; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study (pro..9; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study (pro..10; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study (pro..21; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study (pro..46; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study (pro..3; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study (pro..; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study (pro..; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study (pro..0; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study) (pro..62; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study) (pro..41; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study) (pro..49; cancer cell cell-surface mol. and cancer-specific promoter

identification, targeting complexes, binding partners, and treatment methods)

IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prb4; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prb5; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prb6; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prb7; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Nucleic acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(prb8; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Therapy
(protein; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Intestine
(rectum, RNA from; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Virus
(replication-defective, endosomal lytic agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Schwann cell
(schwannoma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Intestine
(small, RNA from; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Lung, neoplasm
(small-cell carcinoma; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Antibodies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(to cell-surface mols., binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Lasers
(treatment with; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT ADP ribosylation factor
APC protein
Proteins

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor suppressor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Antigens
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(tumor-assocd.; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Vaccines
(tumor; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Bombesin receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(type BB1; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Antitumor agents
(vaccines; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Proteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(viral; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Phototherapy
(with laser light; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Integrins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.alpha.v; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Transforming growth factors
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.beta.-, **apoptosis** inducer; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Transforming growth factor receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.beta.-transforming growth factor type I; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT Transforming growth factor receptors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(.beta.-transforming growth factor type II; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT 186232-61-6, Caspase
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**apoptosis** inducer; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT 85657-75-6, Atrial natriuretic peptide
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(atrial natriuretic peptide clearance receptor; cancer cell cell-surface mol. and cancer-specific promoter identification,

targeting complexes, binding partners, and treatment methods)

IT 51-83-2, Carbachol 51-84-3, Acetylcholine 54-11-5, Nicotine 56-86-0, L-Glutamic acid 56-86-0D, L-Glutamic acid, analogs 487-79-6, Kainic acid 2379-57-9, DNQX 9001-26-7, Prothrombin 10174-[illegible]-8, 6-Chlorokynurenic acid 11032-[illegible]-4, .alpha.-Bungarotoxin 53019-39-3, Taipoxin 63231-47-41, Quinoxaline-2,3-dione, derivs. [illegible]643-89-4 102771-[illegible]-6, SYM1524[illegible] 10931-16-6, Von Willebrand's factor 115066-14-3, CNQX 118876-58-7, NBQX 120[illegible]-15-4 124[illegible]-73-6 140187-[illegible]-1 140187-25-3 14[illegible]-45-[illegible], matrix metalloproteinase 2 201739-11-2, [illegible]-3,5-ICPG 404843-77-2, Reelin 47[illegible]577-[illegible]-4 482[illegible]-85-1 48[illegible]-86-[illegible] 48[illegible]-87-[illegible] 4[illegible]64-63-[illegible]

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT 13714-[illegible]1-[illegible] [illegible]237-[illegible]3-[illegible] 47[illegible]-48-[illegible] 4[illegible]7-[illegible] 47[illegible]643-4[illegible]-2
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT 58-85-5, Biotin 9013-20-1, Streptavidin
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT 50-02-2, Dexamethasone 50-76-0, Actinomycin D 53-79-2, Puromycin 54-05-7, Chloroquine 66-81-9, Cycloheximide 302-79-4, Retinoic acid 7689-03-4, Camptothecin 18883-66-4, Streptozotocin 33419-42-0, Etoposide 52665-69-7, A23187 62996-74-1, Staurosporine 67526-95-8, Thapsigargin 78111-17-8, Okadaic acid
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT 9001-48-[illegible]
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(endosomal lytic agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT 71-44-3, Spermine 124-20-9, Spermidine 25104-18-1, Poly-L-lysine 38000-06-5, Poly-L-lysine
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleic acid binding agent; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT 482671-30-7 482671-31-8 482671-32-9 482671-33-0 482671-34-1
482671-35-2 482671-36-3 482671-37-4 482671-38-5 482671-39-6
482671-40-9 482671-41-0 482671-42-1 482671-43-2 482671-44-3
482671-45-4 482671-46-5 482671-47-6 482671-48-7 482671-49-8
482671-50-1 482671-51-2 482671-52-3 482671-53-4 482671-54-5
482671-55-6 482671-56-7 482671-57-8 482671-58-9 482671-59-0
482671-60-3 482671-61-4 482671-62-5 482671-63-6 482671-64-7
482671-65-8 482671-66-9 482671-67-0
RL: PRP (Properties)
(unclaimed nucleotide sequence; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

IT 482671-15-8 482671-16-9 482671-17-0 482671-18-1 482671-19-2
482671-20-5 482671-21-6 482671-22-7 482671-23-8 482671-24-9

402671-25-0 402671-26-1 402671-27-2 402671-28-3 402671-29-4
RL: PRP (Properties)
(unclaimed protein sequence; cancer cell cell-surface rel. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)
IT [illegible]

RL: PRP (Properties)
(unclaimed sequence; cancer cell cell-surface rel. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

L75 ANSWER 1 OF 13 HCAPLUS COPYRIGHT 2003 ACS
AN **2002:832650** HCAPLUS
DN **137:351517**
TI Use of dendritic cell-attracting chemokines for augmentation of an **immune response**
IN Nikolich, Thomas J.; Talbot, Dale; Berkowitz, Robert; Cheng, Wei; Howard, Maureen; Premack, Brett
PA Chemokine Pharmaceuticals, USA
SO PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K039-00
CC 14-5 (Immunochemistry)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002083169	A1	20021024	WO 2001-US41711	20011010

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRAI US 2001-8461 A 20010411
AB The authors disclose a method for enhancing an **immune response** to an antigen. In an example, the authors demonstrate that the antibody **response** to a model antigen is enhanced by the coadministration of CCL20 or vMIP2 chemokines. The compns. and methods are useful for, among other things, vaccine formulation for therapeutic and prophylactic vaccination (**immunization**) and for prodn. of useful antibodies (e.g., monoclonal antibodies for therapeutic or diagnostic use).
ST vaccine immunization dendritic cell chemokine

IT Chemokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses
(MCA-1; enhancement of **immune responses** to antigens by)
IT Chemokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses
(MIP; enhancement of **immune responses** to antigens by
IT Glycoproteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CD40-L (antigen CD40 ligand); with dendritic cell-attracting chemokines for enhancement of **immune responses**)
IT Chemokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses
(MCP-1 (hemofiltrate CC chemokine 1); enhancement of **immune responses** to antigens by
IT Chemokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses
(MCK-2, viral; enhancement of **immune responses** to antigens by
IT Chemokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses
(MDC (macrophage-derived chemokine); enhancement of **immune responses** to antigens by
IT Chemokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses
(MPIF-1; enhancement of **immune responses** to antigens by)
IT Chemokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MIG (monokine induced by interferon-.gamma.); enhancement of **immune responses** to antigens by)
IT Chemokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(TECK; enhancement of **immune responses** to antigens by)
IT **Immunostimulants**
(adjuvants, Freund's incomplete; with dendritic cell-attracting chemokines for enhancement of **immune responses**)
IT **Immunostimulants**
(adjuvants; with dendritic cell-attracting chemokines for enhancement of **immune responses**)
IT Astrocyte
(astrocytoma; dendritic cell-attracting chemokines for enhancement of antitumor **immune response** to)
IT Immunostimulation
(by dendritic cell-attracting chemokines)
IT Polysaccharides, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(capsular; with dendritic cell-attracting chemokines for enhancement of **immune responses**)
IT Drug delivery systems
(carriers; for dendritic cell-attracting chemokines in enhancement of **immune responses**)
IT Antibodies

PL: BSU (Biological study, unclassified); BIOL (Biological study)
(chemotaxins for dendritic cells enhance **immune response** by)
IT Human
(dendritic cell-attracting chemokines enhance **immune response** to antigens)
IT Melanoma
(dendritic cell-attracting chemokines for enhancement of antitumor **immune response** to)
IT Hepatitis virus
Influenza virus
(dendritic cell-attracting chemokines for enhancement of **immune responses** to)
IT Chemokines
PL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(dendritic cell-attracting; enhancement of **immune responses** to antigens by)
IT Brain, neoplasm
Ovary, neoplasm
(enhancement of antitumor **immune response** by expression of dendritic cell-attracting chemokines in)
IT Neisseria meningitidis
Streptococcus
Streptococcus pneumoniae
(enhancement of **immune response** with dendritic cell-attracting chemokines on polysaccharide carriers from)
IT Eotaxin
Macrophage inflammatory protein 1.alpha.
Macrophage inflammatory protein 1.beta.
Macrophage inflammatory protein 2
Monocyte chemoattractant protein-1
RANTES (chemokine)
PL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(enhancement of **immune responses** to antigens by)
IT **Dendritic cell**
(enhancement of **immune responses** to antigens by chemotaxins for)
IT Immunization
(genetic; with antigen in combination with dendritic cell-attracting chemokines)
IT **Neuroglia**
(**glioblastoma**; dendritic cell-attracting chemokines for enhancement of antitumor **immune response** to)
IT Neuroglia
(glioma; dendritic cell-attracting chemokines for enhancement of antitumor **immune response** to)
IT Neuroglia
(gliosarcoma; dendritic cell-attracting chemokines for enhancement of antitumor **immune response** to)
IT Chemokines
PL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(leukotactins; enhancement of **immune responses** to antigens by)
IT Chemokines
PL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(macrophage inflammatory protein 1.gamma.; enhancement of **immune responses** to antigens by)
IT Chemokines
PL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)
macrophage inflammatory protein 3.alpha.; enhancement of **immune responses** to antigens by)

IT Chemokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(macrophage inflammatory protein 3.beta.; enhancement of **immune responses** to antigens by)

IT Chemokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(macrophage inflammatory protein-1.delta.; enhancement of **immune responses** to antigens by)

IT RANTES (chemokine)
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methionylated; enhancement of **immune responses** to antigens by)

IT Chemokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monocyte chemoattractant protein 3; enhancement of **immune responses** to antigens by)

IT Cytokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monocyte chemoattractant protein 4; enhancement of **immune responses** to antigens by)

IT Chemokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monocyte chemoattractant protein 5; enhancement of **immune responses** to antigens by)

IT Chemokines
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monocyte chemoattractant protein-2; enhancement of **immune responses** to antigens by)

IT Mammary gland
neoplasm; dendritic cell-attracting chemokines for enhancement of antitumor **immune response** to)

IT Fusion proteins (chimeric proteins)
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(of dendritic cell-attracting chemokines for enhancement of **immune responses**)

IT Vaccines
synthetic; enhancement of **immune responses** to antigens by chemotaxins for dendritic cells)

IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd.; dendritic cell-attracting chemokines for enhancement of **immune responses** to)

IT Vaccines
tumor; enhancement of **immune responses** to antigens by chemotaxins for dendritic cells)

IT Antitumor agents
vaccines; enhancement of **immune responses** to antigens by chemotaxins for dendritic cells)

IT Gene therapy
(with dendritic cell-attracting chemokines)

IT Alums

Cytokines
Interleukin 1
Interleukin 10
Interleukin 12
Interleukin 13
Interleukin 18
Interleukin 2
Interleukin 7
Interleukin 8
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(with dendritic cell-attracting chemokines for enhancement of **immune responses**)

IT Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(.gamma.; with dendritic cell-attracting chemokines for enhancement of **immune responses**)

IT 474337-38-7
RL: PRP (Properties)
(dendritic cell-attracting chemokines for enhancement of **immune responses**)

IT 474345-29-4 474345-30-7 474345-31-8 474345-32-9 474345-33-0
474345-34-1
RL: PRP (Properties)
(unclaimed protein sequence; use of dendritic cell-attracting chemokines for augmentation of an **immune response**)

IT 9004-54-0, Dextrans, biological studies 83869-56-1, GM-CSF
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(with dendritic cell-attracting chemokines for enhancement of **immune responses**)

L75 ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2003 ACS
AN **2002:220814** HCAPLUS
DN **136:259587**
TI Novel tumor-associated marker
IN Trakht, Ilya; Canfield, Robert; Balamarov, Gary; Rudchenko, Sergei
PA The Trustees of Columbia University in the City of New York, USA
SO PCT Int. Appl., 276 pp.
CODEN: PIXXD
DT Patent
LA English
IC ICM C12Q
CC 15-10 (Biochemical Methods)
Section cross-reference(s): 1, 14, 15

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002026951	A2	20020404	WO 2001-US29242	20010918
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001092278	A5	20020408	AU 2001-92278	20010918
PRAI US 2000-664958	A	20000918		
WO 2001-US29242	W	20010918		

AB The present invention provides a heteromyeloma cell which does not produce any antibody and is capable of producing a trioma cell which does not produce any antibody when fused with a human lymphoid cell. Wherein the trioma cell so produced is capable of producing a tetroma cell which

produces a monoclonal antibody having specific binding affinity for an antigen when fused with a second human lymphoid cell and such second human lymphoid cell produces an antibody having specific binding affinity for the antigen. The present invention provides monoclonal antibody-producing hybridomas designated 27.F7 and 27.B1. The invention provides a method of detecting TIP-2 antigen on the surface of cancer cells in a sample, and therefore a method for diagnosing cancer in a subject. Further a method for diagnosing and treating said cancer in a subject is provided. The invention provides isolated peptides amino acid sequences (Lys Leu Leu Gly Gly Asn Ile Gly Leu) and (Ser Leu Leu Gly Cys Arg His Tyr Glu Val). The invention provides a kit for detecting the presence of TIP-2 antigen-bearing cancer cells. The invention provides a method for immunohistochem. screening of tissue sections. The invention provides a method for monitoring progression of cancer wherein the cancer cells are TIP-2 antigen-bearing cells.

ST cancer diagnosis TIP protein genetic method monoclonal antibody immunohistochem

IT Proteins
RL: ANT (Analyte ; DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses
(TIP-2(Tax interacting, clone 2; novel tumor-assocd. marker)

IT Hybridoma
(27.F7 and 27.B1; novel tumor-assocd. marker)

IT Multiple myeloma
(NS1 hetero-, fused with human lymphoma cell forming tetroma cells; novel tumor-assocd. marker)

IT Imaging
(RIA, device; novel tumor-assocd. marker

IT PCR (polymerase chain reaction)
(RT-PCR reverse transcription-PCR); novel tumor-assocd. marker)

IT Infection
agent of; novel tumor-assocd. marker

IT Bacillus anthracis
(anthrax from; novel tumor-assocd. marker)

IT Bacteria (Eubacteria)
Eukaryota
Virus
antigen; novel tumor-assocd. marker)

IT Skin, neoplasm
basal cell carcinoma; novel tumor-assocd. marker)

IT Toxins
RL: ADV (Adverse effect, including toxicity ; BIOL (Biological study)
tetanus; novel tumor-assocd. marker)

IT Lung, neoplasm
Mammary gland
Ovary, neoplasm
Prostate gland
carcinoma; novel tumor-assocd. marker)

IT Uterus, neoplasm
cervix, carcinoma; novel tumor-assocd. marker)

IT Intestine, neoplasm
colon, carcinoma; novel tumor-assocd. marker)

IT Cytolysis
complement-dependent; novel tumor-assocd. marker)

IT Immunity
dysfunction of, CD3 or CD4 mediated; novel tumor-assocd. marker)

IT Enzymes, biological studies
Hormones, animal, biological studies
RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
dysfunction of; novel tumor-assocd. marker)

IT Uterus, neoplasm
endometrium, carcinoma; novel tumor-assocd. marker)

IT Cytometry

(flow; novel tumor-assocd. marker)
IT Histochemistry
(formalin-fixed; novel tumor-assocd. marker)
IT Immunoglobulins
RL: ANT (Analyte); PRP (Properties); ANST (Analytical study)
(fragments, Fab; novel tumor-assocd. marker)
IT Lymphocyte
(fused with MFP-2 trioma cell or heteromyeloma cell; novel tumor-assocd. marker)
IT **Neuroglia**
glioblastoma multiforme; novel tumor-assocd. marker)
IT **Transplant and Transplantation**
graft-vs.-host reaction; novel tumor-assocd. marker)
IT Immunoassay
(immunohistochem.; novel tumor-assocd. marker)
IT Scintigraphy
(immunoscintigraphy, x-ray; novel tumor-assocd. marker)
IT Cell proliferation
(inhibition of; novel tumor-assocd. marker)
IT Drug delivery systems
(liposomes; novel tumor-assocd. marker)
IT Neoplasm
(metastasis; novel tumor-assocd. marker)
IT Antibodies
RL: BSN (Biosynthetic preparation); PRP (Properties); BIOL (Biological study); PREP (Preparation)
(monoclonal; novel tumor-assocd. marker)
IT Leukemia
(myelogenous; novel tumor-assocd. marker)
IT Lymphocyte
(natural killer cell; novel tumor-assocd. marker)
IT Nerve, neoplasm
(neuroblastoma; novel tumor-assocd. marker)
IT AIDS (disease)
Animal tissue
Apoptosis
Ascitic fluid
Autoimmune disease
Bacteremia
Blood analysis
Blood plasma
Blood serum
Bone marrow
Cerebrospinal fluid
Chemiluminescent substances
Chemotherapy
Chromosome
Concentration (process)
Cryopreservation
Cryptococcus (fungus)
Cryptococcus (insect)
Culture media
Drugs
Eyes
Ebola virus
Epitopes
Escherichia coli
Fluorescent substances
Fusion, biological
Genetic methods
Hantavirus

Human
Human T-lymphotropic virus 1
Human T-lymphotropic virus 2
Human herpesvirus
Human papillomavirus
Imaging agents
Immobilization, molecular
Immunity
Influenza virus
Klebsiella
Rabbit
Lupus erythematosus
Lymph
Lymphoma
Macrophage
Mammary gland
Melanoma
Mouse
Neoplasm
Nucleic acid hybridization
Optical imaging devices
Precipitation (chemical)
Prostate gland
Protein sequences
Radiochemical analysis
Rheumatoid arthritis
Saliva
Sepsis
Septicemia
Staphylococcus
Streptococcus
Tear (ocular fluid)
Test kits
Testis, neoplasm
Tetanus
Urine analysis
Viremia
(novel tumor-assocd. marker)

IT Lipopolysaccharides
RL: ANT (Analyte); ANST (Analytical study)
(novel tumor-assocd. marker)

IT DNA
RL: ANT (Analyte); DGN (Diagnostic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(novel tumor-assocd. marker)

IT Enzymes, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(novel tumor-assocd. marker)

IT Radionuclides, biological studies
RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(novel tumor-assocd. marker)

IT mRNA
RL: BMU (Biological study, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process)
(novel tumor-assocd. marker)

IT Primers (nucleic acid)
RL: NMU (Other use, unclassified); USES (Uses)
(novel tumor-assocd. marker)

IT Alcohols, uses
RL: NMU (Other use, unclassified); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(novel tumor-assocd. marker)

IT Toxins
Toxoids
PL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(novel tumor-assocd. marker)
IT Bone, neoplasm
(osteosarcoma; novel tumor-assocd. marker)
IT Immunization
(passive; novel tumor-assocd. marker)
IT **Dendritic cell**
(removal of; novel tumor-assocd. marker)
IT Shock (circulatory collapse)
(septic; novel tumor-assocd. marker)
IT Venoms
(snake; novel tumor-assocd. marker)
IT Venoms
(spider; novel tumor-assocd. marker)
IT Carcinoma
(squamous cell; novel tumor-assocd. marker)
IT Thyroid gland, disease
(thyroiditis; novel tumor-assocd. marker)
IT Hybridoma
(trioma; MFP-2 fused with lymphoid cell; novel tumor-assocd. marker)
IT 405011-19-3
PL: PRP (Properties)
(Unclaimed; novel tumor-assocd. marker)
IT 7704-34-9, Biotin 14596-37-3, Phosphorus, isotope of mass 32, uses
14596-66-3, Phosphorus, isotope of mass 33, uses
PL: ARU (Analytical reagent use); ANST (Analytical study); USES (Uses)
(novel tumor-assocd. marker)
IT 154-17-6, 8-Azaguanine 49863-47-0, Geneticin
PL: PAC (Pharmacological activity); BIOL (Biological study)
(novel tumor-assocd. marker)
IT 9 4846-26-1 9 4846-26-1
PL: ANT (Analyte); DGN (Diagnostic use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
protein sequence; novel tumor-assocd. marker)
IT 405011-19-3, 2: PN: WO 222851 SEQID: 12 unclaimed DNA 405011-21-4, 4: PN: WO 222851 SEQID: 14 unclaimed DNA 405011-25-8, 6: PN: WO0222851 SEQID: 16 unclaimed DNA 405011-30-3, 8: PN: WO 222851 SEQID: 18 unclaimed DNA 405011-[illegible] 405011-67-8 405011-70-3 405011-72-5 405011-74-7 405011-76-9 405011-78-1
PL: PRP (Properties)
(unclaimed nucleotide sequence; novel tumor-assocd. marker)
IT 405011-18-9 405011-20-3 405011-22-5 405011-24-7 405011-64-5 405011-66-7 405011-69-0 405011-71-4 405011-73-6 405011-75-8 405011-77-0 405011-79-2
PL: PRP (Properties)
(unclaimed protein sequence; novel tumor-assocd. marker)

L75 ANSWER 4 OF 13 HCAPLUS COPYRIGHT 2003 ACS
AN **2000:688526** HCAPLUS
TI Induction of antigen-specific unresponsiveness by **glioblastoma** culture supernatants (GCS)
IN **Shearer, Gene M.; Zou, Jian-ping; Coligan, John E.; Chougnet, Claire**
PA The Government of the United States of America, as Represented by the Secret, USA
SO PCT Int. Appl.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K039-00
PAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000056256	A2	20000928	WO 2000-US7959	20000323
	WO 2000056256	A3	20010125		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2000041299	A5	20001009	AU 2000-41299	20000323
	EP 1165111	A2	20020102	EP 2000-919639	20000323
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2002539171	T2	20021119	JP 2000-606260	20000323
PRAI	US 1999-126996P	P	19990324		
	WO 2000-US7959	W	20000323		

AB The present invention concerns methods of specifically inhibiting an **immune response** of a subject to one or more selected antigens using an **immunosuppressive** composition derived from a **glioblastoma** cell line. The method steps include obtaining a population of **antigen presenting cells** (**APCs** ; loading the **APC** population with specific antigens in auto-**immune** diseases or using **donor APCs** for **transplantation**; incubating the **APC** population with the **immunosuppressive** composition; and introducing the incubated cells into the subject being treated. The **APCs** can be monocytes, macrophages, or dendritic cells. This method causes specific inhibition of the **immune response** because it induces **apoptosis** and/or anergy in the subject's T cells specific for **antigens present** on the **APCs**, but does not affect the **immune response** to antigens not present on the **APC** surfaces. One particular embodiment of the present method is the specific inhibition of a **transplant** recipient's **immune** reaction to **antigens present** on the allogenic **graft**. A second particular embodiment of the present method is the specific inhibition of the **immune response** to an autoantigenic protein by a subject suffering from an autoimmune disease.

L75 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2003 ACS
AN **2000:109818** HCAPLUS
DN **133:41741**
TI Cell therapy: achievements and perspectives
AU Bordignon, Claudio; Carlo-Stella, Carmelo; Colombo, Mario Paolo; De Vincentiis, Armando; Lanata, Luigi; Lemoli, Roberto Massimo; Locatelli, Franco; Olivieri, Attilio; Rondelli, Damiano; Zanon, Paola; Tura, Sante
CS Institute of Hematology, S. Raffaele Hospital, Milan, Italy
SO Haematologica (1999), 84(12), 1110-1149
CODEN: HAEMAX; ISSN: 0390-6078
PB Ferrata Storti Foundation
DT Journal; General Review
LA English
CC 15-0 (Immunochemistry)
AB A review with 361 refs. Cell therapy can be considered as a strategy aimed at replacing, repairing, or enhancing the biol. function of a damaged tissue or system by means of autologous or allogeneic cells. There have been major advances in this field in the last few years. This has prompted the Working Group on Hematopoietic Cells to examine the current utilization of this therapy in clin. hematol. The method employed

for prepg. this review was that of informal consensus development. Members of the Working Group met three times, and the participants at these meetings examd. a list of problems previously prepd. by the chairmen. They discussed the single points in order to reach an agreement on different opinions and eventually approved the final manuscript. Some of the authors of the present review have been working in the field of cell therapy and have contributed original papers in peer-reviewed journals. In addn., the material examd. in the present review includes articles and abstrs. published in journals covered by the Science Citation Index and Medline. Lymphokine-activated killer (LAK) and tumor-infiltrating lymphocytes (TIL) have been used since the '80s mainly in end-stage patients with solid tumors, but the clin. benefits of these treatments has not been clearly documented. TIL are more specific and potent cytotoxic effectors than LAK, but only in few patients (mainly in those with solid tumors such as melanoma and **glioblastoma** can their clin. use be considered potentially useful. Adoptive **immunotherapy** with **donor** lymphocyte infusions has proved to be effective, particularly in patients with chronic myeloid leukemia, in restoring a state of hematol. remission after leukemia relapse occurring following an allograft. The infusion of **donor** T-cells can also have a role in the treatment of patients with Epstein-Barr virus (EBV)-induced post-**transplant** lymphoproliferative disorders. However, in this regard, generation and infusion of **donor** -derived, virus specific T-cell lines or clones represents a more sophisticated and safer approach for treatment of viral complications occurring in **immunocompromized** patients. Whereas too few clin. trials have been performed so far to draw any firm conclusion, based on animal studies dendritic cell-based **immunotherapy** holds promises of exerting an effective anti-tumor activity. Despite leukemic cells not being **immunogenic**, induction on their surface of co-stimulatory mols. or generation of leukemic dendritic cells may induce antileukemic cytotoxic T-cell **responses**. Tumor cells express a variety of antigens and can be genetically manipulated to become **immunogenic** . The main in vitro and in vivo functional characteristics of marrow mesenchymal stem cells (MSCs) with particular emphasis on their hematopoietic regulatory role are reviewed. In addn., prerequisites for clin. applications using culture-expanded mesenchymal cells are discussed. The opportuneness of using LAK cells or activated natural killer (NK cells in hematol. patients with low tumor burden (e.g. after stem cell **transplantation** should be further explored. Moreover the role of new cytokines in enhancing the antileukemic activity of NK cells and the infusion of selected NK in alternative to CTL for **graft** vs. leukemia (GVL) disease (avoiding **graft** vs. host disease (GVHD) seems very promising. Sepn. of GVL from GVHD through generation and infusion of leukemia-specific T-cell clones or lines is one of the most intriguing and promising fields of investigations for the future. Likewise, strategies devised to improve **immune**-reconstitution and restore specific anti-infectious functions through either induction of unresponsiveness to recipient alloantigens or removal of alloreactive **donor** T-cells might increase the applicability and success of hematopoietic stem cell **transplantation**. Cellular **immunotherapy** with DC must be standardized and several open points, discussed in the chapter, have to be properly addressed with specific clin. studies. Stimulation of leukemic cells via CD40 receptor and transduction of tumor cells with co-stimulatory mols. and/or cytokines may be useful to prevent a tumor escaping **immune** surveillance. Tumor cells can be genetically modified to interact directly with dendritic cells in vivo or recombinant antigen can be delivered to dendritic cells using attenuated bacterial vectors for oral vaccination. MSCs represent an attractive therapeutic tool capable of playing a role in a wide range of clin. applications in the context of both cell and gene therapy strategies.

ST review hematopoietic cell immunotherapy **transplant**

IT Lymphoproliferative disorders
(Epstein-Barr virus-induced posttransplant; cell therapy: achievements and perspectives)
IT Immunostimulants
(adjuvants; cell therapy: achievements and perspectives)
IT **Transplant and Transplantation**
(allotransplant; cell therapy: achievements and perspectives)
IT **Dendritic cell**
Gene therapy
Hematopoietic precursor cell
Human herpesvirus 4
Immunodeficiency
Immunotherapy
Melanoma
T cell (lymphocyte)
(cell therapy: achievements and perspectives)
IT Cytokines
Lymphokines
RL: BAC (Biological study, unclassified ; BIOL (Biological study)
(cell therapy: achievements and perspectives)
IT **Neuroglia**
(**glioblastoma**; cell therapy: achievements and perspectives)
IT **Transplant and Transplantation**
(**graft-vs.-host reaction**; cell
therapy: achievements and perspectives)
IT Lymphocyte
(killer cell; cell therapy: achievements and perspectives)
IT Bone marrow
(mesenchymal stem cell; cell therapy: achievements and perspectives)
IT Leukemia
(myelogenous; cell therapy: achievements and perspectives)
IT Neoplasm
(solid; cell therapy: achievements and perspectives)
IT Mesenchyme
(stem cell, bone marrow; cell therapy: achievements and perspectives)
IT Lymphocyte
(tumor-infiltrating; cell therapy: achievements and perspectives)

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L75 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2003 ACS
AN **2000:68155** HCAPLUS
DN **132:106969**
TI Chemokines as adjuvants of **immune response**
IN Caux, Christophe; Vanbervliet, Beatrice; Lebecque, Serge; Vicari, Alain; Dieu, Marie-Christine
PA Schering-Plough, Fr.
SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM A61K038-19
CC 15-5 (Immunochemistry)
Section cross-reference(s): 1, 63
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 974357	A1	20000126	EP 1998-401799	19980716
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, LV, RO, SI				
WO 2000003728	A1	20000127	WO 1999-US14148	19990715
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9948527	A1	20000207	AU 1999-48527	19990715
US 20020041861	A1	20020411	US 2001-768917	20010124
WO 2002007728	A2	20020131	WO 2001-US1849	20010122
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
PRAI EP 1998-401799	A	19980716		
WO 1999-US14148	W	19990715		
US 2001-768917	A	20010124		

AB Dendritic cells play a crit. role in antigen-specific **immune responses**. Materials and methods are provided for treating disease states, including cancer and autoimmune disease, by facilitating or inhibiting the migration or activation of **antigen-presenting** dendritic cells. In particular, chemokines are used to initiate, amplify or modulate an **immune response**. In one embodiment, chemokines are used to attract dendritic cells to the site of antigen delivery. An increase no. of dendritic at the site of antigen delivery means more antigen uptake and a modified **immune response**.
ST chemokine cytokine immune adjuvant antigen vaccine; cancer autoimmune disease infection **graft** rejection
IT Nucleic acids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(CpG motif-contg.; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Chemokines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(DC tactin .beta.; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Chemokines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MDC (macrophage-derived chemokine); chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Mucins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MUC 2; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Mucins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MUC 3; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Mucins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MUC 4; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(MUC1&; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Cytokines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(RF-16; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Chemokines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(SDF-1 (stromal-derived factor-1); chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Chemokines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Teck; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT **Immunostimulants**
(adjuvants; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antibodies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(anti-CD40; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT **Immunity**
(antigen-specific; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Animal virus
Bacteria (Eubacteria)
Fungi
(antigen; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Infection
(bacterial; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Allergy
Antigen presentation
Autoimmune disease
Cell migration
Dendritic cell
Eye, neoplasm
Genetic vectors
Intestine, neoplasm
Kidney, neoplasm
Liver, neoplasm
Lung, neoplasm

Melanoma
Neoplasm
Ovary, neoplasm
Pancreas, neoplasm
Stomach, neoplasm
Testis, neoplasm
Thyroid gland, neoplasm
Transplant rejection
(chemokines as adjuvants for inducing antigen-specific **immune response**)

IT CD40 (antigen)
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Carcinoembryonic antigen
Chemokines
Cytokines
Hepatocyte growth factor receptors
Interleukin 4
Macrophage inflammatory protein 1.alpha.
Macrophage inflammatory protein 1.beta.
Prostate-specific antigen
RANTES (chemokine)
Tumor necrosis factors
alpha.-Fetoproteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Intestine, neoplasm
(colon; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Intestine, neoplasm
(colorectal; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Uterus, neoplasm
(endometrium; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Mucins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(episialins; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT **Neuroglia**
(**glioblastoma**; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Neuroglia
(glioma; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Glycoproteins, specific or class
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gp100; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Sialoglycoproteins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(gp75; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Liver, neoplasm
(hepatoma; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Parasite
(infection; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Drug delivery systems
(injections, i.m.; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Drug delivery systems
(injections, s.c.; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Drug delivery systems
(intradermal; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Organ, animal
(lymphoid; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Chemokines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(macrophage inflammatory protein, 3.alpha.; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanoma-associd., high mol. wt.; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanoma-associd., melan A; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanoma-associd.; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Transferrins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(melanotransferrins; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Carcinoma
(metastatic; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Chemokines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monocyte chemoattractant protein 3; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Cytokines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(monocyte chemoattractant protein 4; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Bladder
Esophagus
Head
Mammary gland
Neck, anatomical
Prostate gland
(neoplasm; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Drug delivery systems
(topical; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-associd., DDC; chemokines as adjuvants for inducing antigen-specific **immune response**)
IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(tumor-assocd., Her 2; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd., MAGE-12; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd., MAGE-1; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd., MAGE-3; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd., MAGE-4; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd., MAGE-1; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd., MART-1; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd., Tyr1; chemokines as adjuvants for inducing antigen-specific **immune response**

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd., Tyr2; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd., gp9; chemokines as adjuvants for inducing antigen-specific **immune response**

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd., pMel 17; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antigens
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd., prostate specific membrane antigen; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Antigens
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor-assocd.; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT Infection
(viral; chemokines as adjuvants for inducing antigen-specific **immune response**)

IT 9002-10-2, Tyrosinase 9002-61-3 9031-28-1, Thyroperoxidase 14215-68-0, .alpha.-N-Acetylgalactosamine 83869-56-1, GM-CSF
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chemokines as adjuvants for inducing antigen-specific **immune response**)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE
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(2) Fioretti, F; J IMMUNOL 1998, V161(1), P242 HCAPLUS
(3) Indiana University Foundation; WO 9413311 A 1994 HCAPLUS
(4) Univ Texas; WO 9407515 A 1994 HCAPLUS

L75 ANSWER 7 OF 13 HCAPLUS COPYRIGHT 2006 ACS
AN **1999:736887** HCAPLUS
DN **132:48718**
TI Development of systemic immunity to **glioblastoma** multiforme using tumor cells genetically engineered to express the membrane-associated isoform of macrophage colony-stimulating factor
AU Graf, Martin R.; Jadus, Martin R.; Hisecodt, John C.; Wepsic, H. Terry; Grander, Gale A.
CS Departments of Molecular Biology and Biochemistry, University of California, Irvine, CA, 92697, USA
SO Journal of Immunology (1999), 163(10), 5544-5551
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
CC 15-2 (Immunochemistry)
AB We investigated the ability of Fischer rat T9 **glioblastoma** cells transduced with cDNA genes for the secreted (s) or membrane-associd. (m) isoform of M-CSF to elicit an antitumor **response** when implanted into syngeneic animals. Intracranial (i.c.) implantation of 1.times.105 T9 cells expressing mM-CSF (T9/mM-CSF) resulted in 80% tumor rejection. Electron microscopy of the T9/mM-CSF tumor site, 2-4 days postimplantation, showed marked infiltration by macrophages, many of which were in phys. contact with the T9/mM-CSF cells. Animals that rejected T9/mM-CSF cells were resistant to s.c. rechallenge with T9 cells, but not syngeneic MadB106 breast adenocarcinoma cells, suggesting that T9-specific **immunity** can be generated within the brain via the endogenous **APCs**. Intracranial injection of parental T9, vector control (T9/LXSN), or T9 cells secreting M-CSF (T9/mM-CSF) was 100% fatal. S.c. injection of 1.times.10^7 T9/mM-CSF, T9/LXSN, or parental T9 cells resulted in progressive tumors. In contrast, T9/mM-CSF cells injected s.c. were destroyed in 7-10 days and animals developed systemic **immunity** to parental T9 cells. Passive transfer of CD3+ T cells from the spleens of **immune** rats into naive recipients transferred T9 glioma-specific **immunity**. In vitro, splenocytes from T9/mM-CSF-**immunized** rats specifically proliferated in **response** to various syngeneic glioma stimulator cells. However, only marginal T cell-mediated cytotoxicity was obsd. by these splenocytes in a CTL as against T9 target cells, regardless of restimulation with T9 cells. **Immunization** with viable T9-mM-CSF cells was effective in eradicating i.c. T9 tumors.
ST vaccine **glioblastoma** multiforme MCSF macrophage T lymphocyte
IT Gene, animal
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(CSF-1, membrane-associd. isoform; development of systemic immunit **glioblastoma** multiforme using tumor cells genetically engineered to express the membrane-associd. isoform of M-CSF)
IT Genetic engineering
Immunization
Macrophage
T cell (lymphocyte)
Vaccines
(development of systemic immunity to **glioblastoma** multiforme using tumor cells genetically engineered to express the membrane-associd. isoform of M-CSF)
IT **Neuroglia**
Neuroglia
(**glioblastoma multiforme**, inhibitors; development

of systemic immunity to **glioblastoma multiforme** using tumor cells genetically engineered to express the membrane-associd. isoform of M-CSF)

IT Antitumor agents
(**glioblastoma** multiforme; development of systemic immunity to **glioblastoma** multiforme using tumor cells genetically engineered to express the membrane-associd. isoform of M-CSF)

IT Antigens
RL: BSU (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(tumor-associd.; development of systemic immunity to **glioblastoma** multiforme using tumor cells genetically engineered to express the membrane-associd. isoform of M-CSF)

IT 81627-83-0, Colony-stimulating factor 1
RL: BSU (Biological process); BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative); BSU (Biological study)
(membrane-associd. isoform; development of systemic immunity to **glioblastoma** multiforme using tumor cells genetically engineered to express the membrane-associd. isoform of M-CSF)

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L75 ANSWER 5 OF 13 HCAPLUS COPYRIGHT 2003 ACS
AN **1999:468593** HCAPLUS
DN **131:101258**
TI Materials and methods for treating oncological disease
IN Lawman, Patricia; Lawman, Michael J. P.
PA Morphogenesis, Inc., USA
SO PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07K014-00
CC 15-2 (Immunochemistry)
Section cross-reference(s): 3
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9936433	A2	19990722	WO 1999-US787	19990114
	WO 9936433	A3	19990923		
	W: CA, JP, US				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	US 20020141981	A1	20021003	US 2001-903074	20010910
PRAI	US 1998-71497P	P	19980114		
	WO 1999-US787	A1	19990114		
	US 1999-394226	B1	19990913		

AB Novel methods are disclosed for treating oncol. disorders in an individual or animal using a superantigen expressed in tumor cells. A gene encoding a superantigen, such as an M-like protein of group A streptococci, can be introduced into a tumor cell in order to make the tumor cell more **immunogenic** in the host. Also contemplated are methods wherein a cell expresses a superantigen or superantigens, and **immunogenic** or **immunostimulatory** proteins, such as foreign MHC, cytokines, porcine-derived hyperacute rejection antigen, Mycobacterium-derived antigens, and the like. The subject invention also pertains to cells transformed with polynucleotides encoding a superantigen and foreign MHC antigen, cytokines, and other **immunogenic** or **immunostimulatory** proteins. Transformed cells according to the subject invention are then provided to an individual or animal in need of treatment for an oncol. disorder. The **immune response** to tumor cells transformed according to the present invention inhibits in vivo tumor growth and results in subsequent tumor regression. The subject invention also pertains to cell lines transformed with genes encoding a superantigen and, optionally, a foreign Class II MHC antigen and/or a cytokine.

ST oncol disease superantigen transformed tumor cell; MHC cytokine superantigen immunogen cancer therapy

IT Proteins, specific or class
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(M-like; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Histocompatibility antigens
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified);

THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(MHC (major histocompatibility complex), class I; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Histocompatibility antigens
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(MHC (major histocompatibility complex), class II, -DR; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Histocompatibility antigens
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(MHC (major histocompatibility complex), class II; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Histocompatibility antigens
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(MHC (major histocompatibility complex), class III; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Histocompatibility antigens
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(MHC (major histocompatibility complex); transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Kidney, neoplasm
(Wilms'; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Mycobacterium
(antigen; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT **Neuroglia**
(**glioblastoma**; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Neuroglia
(glioma; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Liver, neoplasm
(hepatoma; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Antigens
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(hyperacute rejection; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Proteins, specific or class
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(immunostimulatory; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Brain, neoplasm
(medulloblastoma; transformed tumor cells encoding a superantigen and a

bacterial or eukaryotic protein for treating oncol. disease)

IT Nerve, neoplasm
(neuroblastoma; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Nucleic acids
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(single- or double-stranded; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Antigens
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(superantigens; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Adeno-associated virus
Adenoviridae
Antitumor agents
Bacteria (Eubacteria)
Brain, neoplasm
Carcinoma
Chemotherapy
DNA sequences
Dendritic cell
Domestic animal
Eukaryote (Eukaryotae)
Genetic vectors
Herpesviridae
Leukemia
Liposomes
Lymphoma
Melanoma
Neoplasm
Plasmids
Poxviridae
Radiotherapy
Retroviridae
Sarcoma
Streptococcus group A
Surgery
Swine
Virus
(transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Antigens
Cytokines
DNA
Gene, animal
Gene, microbial
Interleukin 1
Interleukin 2
Interleukin 3
Interleukin 4
Macrophage inflammatory protein 1.alpha.
Macrophage inflammatory protein 1.beta.
Polynucleotides
Tumor necrosis factors
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

IT Antibodies
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
IT Vaccines
(tumor; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
IT Antitumor agents
(vaccines; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
IT Transforming growth factors
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(.beta.-; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
IT Interferons
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(.beta.; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
IT Interferons
RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(.gamma.; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
IT 220078-03-8
RL: PRP (Properties)
(nucleotide sequence; transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)
IT 81869-56-1P, GM-CSF
RL: BPN (Biosynthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(transformed tumor cells encoding a superantigen and a bacterial or eukaryotic protein for treating oncol. disease)

L75 ANSWER 9 OF 13 HCAPLUS COPYRIGHT 2003 ACS
AN **1999:257595** HCAPLUS
DN **131:57611**
TI Human glioma-induced immunosuppression involves soluble factor(s) that alters monocyte cytokine profile and surface markers
AU **Zou, Jian-Ping**; Morford, Lorra A.; **Chougnet, Claire**; Dix, Amy R.; Brooks, Andrew D.; Torres, Diana; Shaman, Jon D.; **Coligan, John E.**; Brooks, William H.; Rossman, Thomas L.; **Shearer, Gene M.**
CS Experimental Immunology Branch, National Cancer Institute, National Institutes of Health, Bethesda, MD, 20892, USA
SO Journal of Immunology (1999), 162(8), 4685-4692
CODEN: JOIMA3; ISSN: 0022-1767
PB American Association of Immunologists
DT Journal
LA English
CC 15-5 (Immunochemistry)
AB Patients with glioma exhibit deficient in vitro and in vivo T cell **immune** activity, and human **glioblastoma** culture supernatants (GCS) inhibit in vitro T lymphocyte **responses**. Because **APC** are essential for initiating and regulating T cell **responses**, we investigated whether GCS would affect cytokines produced by monocytes and T cells from healthy donors of PBMC. Incubation of PBMC with GCS decreased prodn. of IL-12, IFN-.gamma., and TNF-.alpha., and increased prodn. of IL-6 and IL-10. The GCS-induced changes in IL-12

and IL-10 occurred in monocytes, and involved changes in IL-12 p40 and IL-10 mRNA expression. Incubation with GCS also resulted in reduced expression of MHC class II and of CD80/86 costimulatory mols. on monocytes. The **immunosuppressive** effects were not the result of IL-6 or TGF-.beta.1 that was detected in GCS. However, it was due to a factor(s) that is resistant to pH extremes, differentially susceptible to temp., susceptible to trypsin, and has a min. mol. mass of 30 kDa. Our findings show that **glioblastoma**-generated factors that are known to suppress T cell **responses** alter the cytokine profiles of monocytic **APC** that, in turn, inhibit T cell function. This model indicates that monocytes can serve as an intermediate between tumor-generated **immune**-suppressive factors and the T cell **responses** that are suppressed in gliomas.

ST glioma immunosuppression immunosuppressive factor monocyte cytokine

IT Histocompatibility antigens
PL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(MHC (major histocompatibility complex), class II; human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)

IT **Neuroglia**
glioblastoma; human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)

IT Neuroglia
glioma; human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers

IT Immunosuppression
Monocyte
(human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)

IT CD80 (antigen)
CD86 (antigen)
PL: BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)
(human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)

IT Interleukin 10
PL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)

IT Interleukin 12
PL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)

IT Interleukin 6
PL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)

IT Tumor necrosis factors
PL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)

IT T cell (lymphocyte)
(human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers in relation to)

IT Cytokines
PL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(immunosuppressive; human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)
IT Interferons
RL: BSU (Biological study, unclassified); MFM (Metabolic formation); BIOL (Biological study); FORM (Formation, nonpreparative)
(gamma.; human glioma-induced immunosuppression involves sol. factors that alter monocyte cytokine profile and surface markers)
RE.CNT 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD
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L75 ANSWER 10 OF 13 HCAPLUS COPYRIGHT 2003 ACS
AN 1993:106314 HCAPLUS
DN 118:106314
TI Human **glioblastoma** cell line 86HG39 activates T cells in an antigen specific major histocompatibility complex class II-dependent manner
AU Daubener, Walter; Jennati, Samira Seghrouchni; Wernet, Peter; Bilzer, Thomas; Fischer, Hans Georg; Hadding, Ulrich
CS Inst. Med. Mikrobiol. Virol., Heinrich-Heine-Univ., Duesseldorf, D-4000, Germany
SO Journal of Neuroimmunology (1992), 41(1), 21-8
CODEN: JNRIDW; ISSN: 0165-5728
DT Journal
LA English
CC 15-10 (Immunochemistry)
AB The capacity of 3 different human **glioblastoma** cell lines to activate human T cells was analyzed by measuring major histocompatibility complex (MHC) antigen expression, monokine secretion, and lectin, monoclonal antibody (mAb) OKT3, and antigen-driven T cell proliferation. All **glioblastoma** cells tested were able to induce PHA and Con A-driven T cell proliferation in a dose-dependent fashion, while all failed to induce T cell activation with mAb OKT3. In addn., the **glioblastoma** cell line 86HG39 induced tetanus toxoid and toxoplasma lysate antigen-specific T cell proliferation. The responding T cell lines originated from only 1 out of 5 different **donors**. This foreign antigen-specific T cell proliferation induced by 86HG39 cells was inhibited with mAb L243 directed against HLA-DR mols. Study of monokine secretion by 86HG39 cells showed a strong interleukin (IL)-6 secretion after lipopolysaccharide (LPS) treatment, while no IL-1 secretion was obsd. Furthermore, only 86HG39 cells were pos. for HLA-DR mols., whereas interferon (IFN)-gamma treatment of 87HG28 and 87HG31 cells was necessary for the induction of class II antigen expression. Thus, cell line 86HG39 shows many features of an **antigen presenting cell** and the interaction of these cells with MHC compatible human T cells might be a useful model to study cellular immune reactions within the central nervous system.
ST **glioblastoma** T lymphocyte antigen presentation HLA
IT Animal cell line
(86HG39, antigen-specific T-cell activation by human, class II antigen-dependent, antigen presentation in relation to)
IT Antigens
PL: PROC (Process)
(presentation of, by human **glioblastoma** cell line)
IT Histocompatibility antigens
PL: BIOL (Biological study)
(HLA, class II, **glioblastoma** cell line activation of human antigen-specific T-cells dependent on, antigen presentation in relation to)
IT Histocompatibility antigens
PL: BIOL (Biological study)
(HLA-DR, **glioblastoma** cell line activation of human antigen-specific T-cells dependent on, antigen presentation in relation to)
IT Lymphocyte
(T-cell, activation of human antigen-specific, by **glioblastoma**

cell line, class II antigen-dependent, antigen presentation in relation to)

IT Lymphokines and Cytokines
PL: PROC (Process)
(interleukin 1, secretion of, by antigen-presenting **glioblastoma** cell line, of humans)

IT Lymphokines and Cytokines
PL: BIOL (Biological study)
(interleukin 6, secretion of, lipopolysaccharide induced, by antigen-presenting **glioblastoma** cell line, of humans)

IT **Neuroglia**
(neoplasm, **glioblastoma**, antigen-specific T-cell activation by cell line of human, class II antigen-dependent, antigen presentation in relation to)

IT 140-64-6
PL: ADV (Adverse effect, including toxicity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(human **glioblastoma** cell line 86HG39 activates T cells in antigen-specific major histocompatibility complex class II-dependent manner)

L75 ANSWER 11 OF 13 HCAPLUS COPYRIGHT 2003 ACS
AN **1990:629106** HCAPLUS
DN **113:229106**
TI Adult human glial cells can present target antigens to HLA-restricted cytotoxic T-cells
AU Dhib-Jalbut, Suhayl; Kufta, Conrad V.; Flerlage, Marjorie; Shimojo, Naoki; McFarland, Henry F.
CS Neuroimmunol. Branch, Natl. Inst. Neurol. Disord. Stroke, Bethesda, MD, 20892, USA
SO Journal of Neuroimmunology (1990), 29(1-3), 203-11
CODEN: JNRIDW; ISSN: 0165-5728
DT Journal
LA English
CC 15-2 (Immunochemistry)
AB T-lymphocyte recognition of antigen either on **antigen-presenting cells** (**APC**) necessary for the generation of an **immune response** or on target cells during the effector phase of a cellular **immune response** requires expression of HLA mols. Although **immune** mechanisms operate in many disease processes of the central nervous system (CNS), cells of the CNS generally express low levels of HLA mols. In this study, the potential for upregulation of HLA mols. on adult human glial cells was examd. The functional implication of this upregulation was assessed by the capacity of glial cells to process and present target antigens to HLA class I-restricted influenza-specific and class II-restricted **myelin basic protein** (**MBP**)-specific CTL lines. Glial cells cultured from adult human surgical brain specimens or cells from established **glioblastoma** multiforme cell lines were studied. Lysis by antigen-specific CTLs was dependent on treatment of the target cell with interferon-.gamma.. The lysis was HLA restricted and antigen specific. The results indicate that adult human glial cells can process and present antigen to HLA-restricted CTLs but require the upregulation of HLA mols. These findings have implications for infectious and autoimmune diseases of the CNS.
ST glia **antigen presentation** cytotoxic T lymphocyte
IT Neuroglia
(target **antigen presentation** by, to cytotoxic T lymphocyte, HLA antigen restriction in)
IT Antigens
RL: BIOL (Biological study)
(target, presentation of, by glial cells to cytotoxic T cells)
IT Antigens

PL: BIOL (Biological study)
(HLA, restriction by, in glial cell presentation of target antigens to cytotoxic T cells)
IT **Phospholipoproteins**
PL: BIOL (Biological study)
(**MBP (myelin basic protein)**, cytotoxic T cells specific for, glial cells presentation of antigen to)
IT Lymphocyte
(T-, cytotoxic, target **antigen presentation** to, by glial cells, HLA restriction in)
IT Virus, animal
(influenza, cytotoxic T cells specific for, glial cells presentation of antigen to)
IT Interferons
PL: BIOL (Biological study)
(.gamma., target cell lysis by antigen-specific cytotoxic T lymphocyte dependent on)

L75 ANSWER 12 OF 13 HCAPLUS COPYRIGHT 2003 ACS
AN **1989:229869** HCAPLUS
DN **110:229869**
TI **Glioblastoma**-cell-derived T-cell suppressor factor (G-TsF). Sequence analysis and biologic mechanism of G-TsF
AU Diepl, C.; Bodmer, S.; Hofer, E.; Wrann, M.; Frei, K.; Fontana, A.
CS Dep. Neurosurg., Univ. Hosp., Zurich, Switz.
SO Annals of the New York Academy of Sciences (1988), 540(Adv. Neuroimmunol.), 437-9
CODEN: ANYAA9; ISSN: 0077-8923
DT Journal
LA English
CC 15-5 (Immunochemistry)
AB It was recently demonstrated that human **glioblastoma** cell line 308 releases a factor into the culture medium, termed **glioblastoma** -derived T cell suppressor factor (G-TsF), that inhibitors T cell proliferation in vitro. The similarities between the N-terminal amino acid sequences of G-TsF and same growth factors are reviewed. When tested in a helper T cell line, purified G-TsF inhibited the antigen-induced cell growth in the presence of **antigen-presenting cells**. G-TsF also directly interfered with the growth-promoting effect of interleukin 2. G-TsF may contribute to impaired immunosurveillance and to the cellular immunodeficiency detected in patients with **glioblastoma**.
ST **glioblastoma** derived T suppressor factor
IT Immunosuppression
(in **glioblastoma**, **glioblastoma**-derived T-cell suppressor factor role in, of humans)
IT Protein sequences
(of **glioblastoma**-derived T-cell suppressor factor N terminus, of humans)
IT Lymphocyte
(T-, suppressor, factor-inducing, human **glioblastoma**-derived, amino terminal sequence and biol. mechanism of human)
IT **Neuroglia**
(neoplasm, **glioblastoma**, T-suppressor factor from, amino terminal sequence and biol. mechanism of human)
IT Animal growth regulators
PL: BIOL (Biological study)
(.beta.-transforming growth factors, N-terminal sequence and biol. mechanism of human)

L75 ANSWER 13 OF 13 HCAPLUS COPYRIGHT 2003 ACS
AN **1988:421372** HCAPLUS
DN **109:21372**

TI The **glioblastoma**-derived T cell suppressor factor/transforming growth fact r-.beta.2 inhibits T cell growth without affecting the interaction of interleukin . with its receptor

AU Siepl, Christine; Bodmer, Stefan; Frei, Karl; MacDonald, H. Pobson; De Martin, Rainer; Hofer, Erhard; Fontana, Adriano

CS Lep. Neurosurg., Univ. Hosp., Zurich, CH-8044, Switz.

SO European Journal of Immunology (1988), 18 4 , 593-600
CODEN: EJIMAF; ISSN: 0014-2980

DT Journal

LA English

CC 15-5 (Immunochemistry)

AB Human **glioblastoma** cells secrete a peptide termed **glioblastoma**-derived T cell suppressor factor (G-TsF) which inhibits T cell activation. Recently, purifn. and cloning of G-TsF revealed that G-TsF is identical to transforming growth factor-.beta.2. As shown here, G-TsF suppresses the growth of an ovalbumin-specific mouse T helper cell clone (OVA-7T, independently of the stimulus used being either (a) antigen in the presence of **antigen-presenting cells**, or (b) interleukin 2 (IL 2) or (c) phorbol ester and Ca ionophore. In the presence of antibodies against IL 2 receptors, G-TsF was able to suppress the residual proliferation still obsd. when OVA-7T were stimulated with phorbol ester/ionophore. G-TsF failed to inhibit the release of IL 3 from OVA-7T activated with IL 2. The data provide evidence that G-TsF does not directly interfere with interactions of IL 2 with its receptor but rather inhibits T cell activation by interfering with an as yet unidentified pathway used by both IL 2 and phorbol ester/ionophore. When analyzing different monokines and lymphokines for their effect on G-TsF-induced suppression of T cell growth, the only factor found to partially neutralize the effect of G-TsF was tumor necrosis factor-.alpha..

ST **glioblastoma** T cell suppressor factor; interleukin 2 receptor T lymphocyte

IT Receptors
RL: BIOL (Biological study)
(interleukin 2 binding to, **glioblastoma**-derived T-cell suppressor factor inhibition of T-cell growth in relation to)

IT Lymphocyte
(T-, growth of, **glioblastoma**-derived T-cell suppressor factor inhibition of, interleukin 2 binding to receptor in relation to)

IT Lymphokines and Cytokines
RL: PROC (Process)
(interleukin 2, binding of, to receptor, in **glioblastoma**-derived T-cell suppressor factor inhibition of T-cell growth)

IT **Neuroglia**
(neoplasm, **glioblastoma**, T-cell suppressor factor from, T-lymphocyte growth inhibition by, interleukin 2 binding to receptor in relation to)

IT Animal growth regulators
RL: BIOL (Biological study)
(.beta.-transforming growth factors, T-lymphocyte growth inhibition by, interleukin 2 binding to receptor in relation to)

IT Animal growth regulators
RL: SPN (Synthetic preparation); PREP (Preparation)
(.beta.2-transforming)

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L102 ANSWER 1 OF 2 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1999:167716 BIOSIS
DN PREV19990016772
TI **Monocyte** mediated T-cell unresponsiveness.
AU Dix, A. R. (1); Morford, L. A.; **Zou, J. P.**; **Shearer, G. M.**; Brooks, W. H.; Roszman, T. L.
CS (1) Dep. Microbiol. Immunol., Univ. Kentucky, Lexington, KY 40536 USA
SO FASEB Journal, (March 12, 1999) Vol. 13, No. 4 PART 1, pp. A610.
Meeting Info.: Annual Meeting of the Professional Research Scientists for Experimental Biology 99 Washington, D.C., USA April 17-21, 1999
ISSN: 0892-6638.
DT Conference
LA English
CC Immunology and Immunochemistry - Immunopathology, Tissue Immunology *34
Cytology and Cytochemistry - Human *01503
Blood, Blood-Forming Organs and Body Fluids - Lymphatic Tissue and Reticuloendothelial System *11006
Nervous System - Pathology *12506
Neoplasms and Neoplastic Agents - General *24002
General Biology - Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annuals *00520
EC Hominidae 66211
IT Major Concepts
Immune System (Chemical Coordination and Homeostasis); Nervous System (Neural Coordination); Tumor Biology
IT Parts, Structures, & Systems of Organisms
monocytes: blood and lymphatic, immune system; T cells: blood and lymphatic, immune system
IT Diseases
glioblastoma: neoplastic disease, nervous system disease; immunologic defects: immune system disease
IT Alternate Indexing
Glioblastoma (MeSH)
IT Miscellaneous Descriptors
Meeting Abstract
OBGN Super Taxa
Hominidae: Primates, Mammalia, Vertebrata, Chordata, Animalia
OBGN Organism Name
human (Hominidae) : patient
OBGN Organism Superterms
Animal ; Chordates; Humans; Mammals; Primates; Vertebrates

L102 ANSWER 2 OF 2 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1997:327199 BIOSIS
DN PREV19974961640
TI **Glioma**-derived suppressor factor (GSF) induces decreased IL-12 and increased IL-10 production.
AU **Zou, J.-P. (1)**; Morford, L. A.; Brooks, W. H.; **Chougnet, C. (1)**; Roszman, T. L.; **Shearer, G. M. (1)**
CS (1) Exp. Immunol. Br., National Cancer Inst., Bethesda, MD USA
SO Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology, (1997) Vol. 14, No. 4, pp. A30.
Meeting Info.: National AIDS Malignancy Conference Bethesda, Maryland, USA

April 28-30, 1997
ISSN: 1071-9458.
DT Conference; Abstract
LA English
CC General Biology - Symposia, Transactions and Proceedings of Conferences, Congresses, Review Annuals *00520
Endocrine System - General *1002
Nervous System - Pathology *1506
Neoplasms and Neoplastic Agents - Immunology *2406
Neoplasms and Neoplastic Agents - Biochemistry *2406
Immunology and Immunochemistry - Immunopathology, Tissue Immunology *3450
Medical and Clinical Microbiology - Virology *3600
BC Hominidae *3003
IT Major Concepts
Clinical Immunology (Human Medicine, Medical Sciences); Endocrine System (Chemical Coordination and Homeostasis); Infection; Neurology (Human Medicine, Medical Sciences); Oncology (Human Medicine, Medical Sciences)
IT Miscellaneous Descriptors
ACQUIRED IMMUNODEFICIENCY SYNDROME-ASSOCIATED MALIGNANCIES; AIDS-ASSOCIATED MALIGNANCIES; **GLIOBLASTOMA** CELL LINES; GLIOMA-DERIVED SUPPRESSOR FACTOR; GSF; IL-10; IL-12; IMMUNE SYSTEM; INTERLEUKIN-10; INTERLEUKIN-12; NEOPLASTIC DISEASE; PATIENT; PRODUCTION; TUMOR BIOLOGY
OSGN Super Taxa
Hominidae; Primates, Mammalia, Vertebrata, Chordata, Animalia
OSGN Organism Name
human (Hominidae)
OSGN Organism Supernames
animals; chordates; humans; mammals; primates; vertebrates

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FILE LAST UPDATED: 29 JAN 2003 <20030129/UP>
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DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

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http://www.stn-international.de/training_center/patents/stn_guide.pdf <<<

=> s l103,l112

L114 4 (L103 OR L112)

=> d all abeq tech abex tot

L114 ANSWER 1 OF 4 WPIX (C) 2003 THOMSON DERWENT
AN 2002-535643 [61] WPIX
DNN N2002-455927 DNC C2002-152804
TI Compositions useful for treating diseases e.g. allergy, cancer and autoimmune disease, comprises CD1 fusion proteins, preferably multivalent fusion proteins that are present in multimeric fusion form.
DC B04 C06 D16 S03
IN BEHAR, S M; BRENNER, M B; GUMPERZ, J E
PA (BGHM) BRIGHAM & WOMENS HOSPITAL INC; (BEHA-I) BEHAR S M; (BREN-I) BRENNER M B; (GUMP-I) GUMPERZ J E
CTC [illegible]
PI WO 2001094049 A2 20011213 (200261)* EN 88p G01N033-569
RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
W: AU CA JP
AU 2002013588 A 20011217 (200230) G01N033-569
US 2002071842 A1 20020613 (200270) A61K039-395
ADT WO 2001094049 A2 WO 2001-US18175 20010605; AU 2002013588 A AU 2002-13588 20010605; US 2002071842 A1 Provisional US 2000-209416P 20000605, US 2001-874470 20010605
FDT AU 2002013588 A Based on WO 2001094049
PRAI US 2000-209416P 20000605; US 2001-874470 20010605
IC ICM A61K039-395; G01N033-569
ICS G01N033-567
AB WO 200194049 A UPAB: 20020924
NOVELTY - A composition (I) comprising:
(1) a vaccine having an immunogen that binds to a CD1 molecule, and enhances or induces protective immunity to a condition;
(2) a CD1 fusion protein (II) that selectively binds to the immunogen to form a CD1-presented immunogen complex (IC) that activates a cognate CD1-restricted T cell (III); and
(3) a carrier, where (II) enhances or induces protective immunity to the condition, is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) activation (M1) of antigen specific (III) for immunotherapeutic treatment of disease comprising selecting antigen specific (III) and sterilely sorting the selective cells by flow cytometry;
(2) depleting (M2) antigen specific (III) for immunotherapeutic treatment of disease comprising selecting antigen specific (III) and sterilely sorting (or removing) the selective cells;
(3) identifying (M3) an antigen recognized by a (III), comprising contacting (II) with a putative CD1 antigen under conditions to form IC, contacting the IC with a (III) under conditions to allow IC-mediated activation of the T-cell and detecting activation of the T-cell; and
(4) identifying (M4) (III) comprising contacting IC with a putative (III) under conditions to allow complex mediated activation of the T cell and detecting the activation of the T cell.
ACTIVITY - Cytostatic; Immunosuppressive; Antiallergic; Antibacterial; Virucide; Fungicide; Antiinflammatory; Antiasthmatic. Test details given but no supporting data.
MECHANISM OF ACTION - Vaccine (claimed).
USE - (I) is useful for enhancing vaccine-induced acquired protective immunity to a condition such as microbial infectious disease, or to a

tumor, allergen, or an autoantigen, or for treating a condition such as infectious disease, cancer, autoimmune disorder or an allergy, where (II) is administered subsequent to administering the vaccine to enhance recall protective immunity. M1 is useful for activation of antigen specific (III) for immunotherapeutic treatment of disease, M2 is useful for depleting antigen specific (III) for immunotherapeutic treatment of disease, M3 is useful for identifying an antigen recognized by a (III) and M4 is useful for identifying (III), where M4 is also useful for detecting (III) activity in a sample where the activity is from the number of (III) as percentage of the total T cell population or a change in the number and (III) functional activity or a change in the functional activity, where detecting the activity comprises detecting the number of T cells or a change in the number by detecting number of IC containing a detectable label bound to the T cell and the functional activity is from binding of (III) to the complex, cytokine release by (III), calcium flux in (III), protein tyrosine phosphorylation in (III), phosphatidyl inositol turnover in (III) (claimed). Examples of diseases include cancers (e.g. **glioblastomas**, Wilms' tumor, leukemias and allergies (e.g. eczema, hay fever, allergic asthma).

Dwg.0/0

FS CPI EPI

FA AB; DCN

MC CPI: B04-B04B1; B04-B04C; B04-B04D; B04-B04H; B04-B04L; B04-F04; B04-H02; B04-H05C; B04-H08; B04-N03; B05-A01B; B05-B01P; B11-C08E; B12-F04A; B14-A01; B14-A02; B14-A04; **B14-G02A**; **B14-G02D**; B14-H01; B14-H01A; B14-N17C; B14-S11; C04-B04B1; C04-B04C; C04-B04D; C04-B04H; C04-B04L; C04-F04; C04-H02; C04-H05C; C04-H08; C04-N03; C11-C08E; C12-F04A; C14-A04; **C14-G02A**; **C14-G02D**; C14-H01; C14-H01A; C14-N17C; C14-S11; D05-H09; D05-H17C

EPI: B04-B14H1

TECH JPTX: 1.0020.02

TECHNOLOGY FOCUS - BIO TECHNOLOGY - Preferred Composition: In M1, (II) is preferably multivalent, and the condition is, preferably an infectious disease, cancer, autoimmune disease or allergy, and so the immunogen derived is from an infectious agent preferably bacterial, viral, fungal, and a protist infectious agent, or immunogen derived from cancer cell, from a selective marker for the autoimmune disease or from an allergen. Preferred Method: In M1, the selection process comprises straining IC. The method further comprises costimulating a stimulatory agent, expanding the selected T-cells in culture, and then administering the expanded T-cells to a subject in need of such treatment. M2 further comprises administering the selected T-cells which are not antigen specific (III) to a subject, or attaching a toxin to the antigen specific (III) and administering the toxin-labeled cells to the subject. In M3, the contacting step is performed in vitro or in vivo, and (II) is from CD1a, CD1b, CD1c, and CD1d fusion protein, where (II) is in soluble form and is multimeric and is optionally bound to protein A which contains a detectable label for facilitating detection of the protein in either isolated or bound form e.g. immobilized on a solid support. M3 further comprises removing the antigen that is not present in IC. CD1 antigen is naturally-occurring lipid-containing molecule or synthetic molecule, and is preferably contained in or isolated from a total lipid extract of a sample from mammalian cell, plant cell, bacteria, virus, fungus, protist and a synthetic library, and more preferably derived from a mammalian cell which is contained in or derived from blood, cerebrospinal fluid, synovial fluid, tissue, urine, amniotic fluid, peritoneal fluid, and a gastric fluid sample, where the CD1 antigen is a lipid-containing molecule selected from polar lipid (e.g., a ganglioside, phospholipid), neutral lipid, glycolipid, and a lipidated protein or lipidated peptide. (III) is preferably from mouse (III) and a human (III). The detecting step comprises detecting one or more of an indicator from binding of (III) to IC, a change in cytokine release by (III), a change in calcium flux in (III), a change in protein tyrosine phosphorylation flux in (III),

phosphatidyl inositol turnover flux in (III), where detecting binding of (III) to IC preferably comprises detecting binding of (III) to labeled (II), and the cytokine released by (III) is preferably from interferon (e.g. IFN-gamma), interleukin (e.g. IL-2, IL-4, IL-10, IL-13), tumor necrosis factor (e.g. TNF-alpha) and a chemokine. M3 further comprises contacting T-cells with costimulatory agent prior to detecting where the costimulatory agent is from an adhesion molecule (e.g. CD2), an NK complex molecule (e.g. CD161, Cd40), an antibody to the T-cell receptor (e.g. an anti-CD3 antibody), a non-specific stimulator (e.g. phytohemagglutinin (PHA), concanavalin A (Con A), phorbol myristate acetate (PMA), an **antigen-presenting cell** which does not express CD1 and a co-stimulatory molecule (e.g. CD28). In M4, IC preferably comprises a detectable label, and a T cell is contained in a biological sample selected from one of the sample mentioned above. The activation of the T cell is detected preferably by detecting binding of the T cell to the labeled (II), where the detection step comprises detecting the labeled T cells bound to the labeled (II) by flow cytometry.

ABEX

SPECIFIC CELLS - (III) is a mouse NKT-cell, or a cell from DN1.11E5, DN1.B9, DN1-15, and DN1.D6 claimed.

ADMINISTRATION - (I) is administered through oral, rectal, topical, nasal, intradermal or parenteral route. Dosage is 0.01-10.0 (preferably 50-100) mg/kg/day.

EXAMPLE - New cDNA constructs were generated that encode human beta-2 microglobulin attached by a glycine-serine spacer peptide to the N-terminus of the extracellular domains of CD1. The C-terminus of the CD1 molecule is fused by another glycine-serine spacer peptide to the hinge and CH2-CH3 domains of murine IgG2a. The cDNA constructs were cloned into the pBJ1-neo expression vector, for stable expression in mammalian cells (Lin, A. et al., Science, 244:1677-1679 (1989)). The fusion proteins were expressed in Chinese hamster ovary (CHO) cells, and were purified. Purified bovine brain sphingomyelin (Sph) was utilized as synthetic antigen and was tested for recognition of the fusion protein. A composition was prepared by including the synthetic antigen and a fusion protein prepared with optionally a carrier which utilized for treating diseases such as allergies and autoimmune diseases, etc.

L114 ANSWER 2 OF 4 WPIX (C) 2003 THOMSON DERWENT
AN 2002-097495 [13] WPIX
DNC C2002-028051
TI Inducing activation composition for dendritic cells in human, contains polynucleotide, viral vector, or polynucleotide derivative and polyoxyethylene-polyoxypropylene block copolymer.
DC A96 B04 D16
IN ALARCON, V; GUERIN, N; KAEANCY, A Y; LEMIEUX, P; VINOGRADOV, S
PA (UYSK-N) SUPRATEK PHARMA INC
CYC 95
PI WO 2001083696 A2 20011108 (200213)* EN 132p C12N000-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
AU 2001074815 A 20011112 (200213) C12N000-00
ADT WO 2001083696 A2 WO 2001-US13911 20010430; AU 2001074815 A AU 2001-74815 20010430
FDT AU 2001074815 A Based on WO 200183696
PRAI US 2000-200467P 20000501; US 2000-200467P 20000428
IC ICM C12N000-00
AB WO 200183696 A UPAB: 20020226
NOVELTY - An inducing activation composition for dendritic cells (DCs), in

animals comprises a polynucleotide, viral vector, or polynucleotide derivative and polyoxyethylene-polyoxypropylene block copolymer(s).

ACTIVITY - Cytostatic; Anti-inflammatory; Antirheumatic; Antiarthritic; Antiarteriosclerotic; Ophthalmological; Antialcoholism; Osteopathic; Dermatological; Immunosuppressive; Antiulcer; Cardiant; Cerebroprotective; Vasotropic; Virucide; Hepatotropic; Anti-HIV; Protozoacide; Tuberculostatic.

10 Days after ischemia was induced in 1 rabbit hindlimb, 500 g/l of ph-VEGF 165 was formulated with 0.1 wt% of block copolymers was injected intramuscularly (I.M.) into the ischemic hindlimb muscles. After 30 days, an angiography was performed to recognize collateral vessels and histology analysis was carried out to identify capillaries. Ischemic skeletal muscle represented a promising target for gene therapy with naked plasmid DNA formulated with block copolymers. I.M. transfection of genes encoding angiogenic cytokines, particularly those that were naturally secreted by intact cells, constituted an alternative treatment strategy for patients with extensive peripheral vascular disease.

MECHANISM OF ACTION - None given.

USE - The composition is for inducing activation of dendritic cells in animals, preferably human; increasing the level of production and infiltration for DCs in response to gene expression; and increasing the immune response and generates large amounts of DCs in vivo or in vitro cell trained). It is also used in treating genetic diseases including rheumatoid arthritis, psoriasis, Crohn's disease, ulcerative colitis, alpha -thalassemia, beta -thalassemia, carbonic anhydrase II deficiency syndrome, triosephosphate isomerase deficiency syndrome, tetrahydrobiopterin deficient hyperphenylalaninemia, classical phenylketonuria, muscular dystrophy such as Duchenne Muscular Dystrophy, hypercarbocinemia, adenomatous intestinal polyposis, adenosine deaminase deficiency, malignant melanoma, glucose-6-phosphate dehydrogenase deficiency syndrome, arteriosclerosis, and hypercholesterolemia, Gaucher's disease, cystic fibrosis, osteopetrosis, increased spontaneous tumors, T and B cell immunodeficiency, high cholesterol, arthritis, including chronic rheumatoid arthritis, glaucoma, or alcoholism. It can be also used to treat neoplastic diseases including cancer (e.g. breast, pancreatic, gastric, prostate, colorectal, lung, ovarian, lymphomas (such as Hodgkin and non-Hodgkin lymphoma), melanoma, and malignant melanoma, advanced cancer hemophilia B, renal cell carcinoma, **glioblastoma**, astrocytoma, gliomas, acute myelogenous leukemia AML), or cell-mediated lympholysis (CML). It can be used to treat cardiovascular diseases including stroke, cardiomyopathy associated with Duchenne Muscular Dystrophy, myocardial ischemia, or restenosis; infectious diseases such as hepatitis, HIV infections and acquired immunodeficiency syndrome (AIDS), herpes, cytomegalovirus (CMV), or associated disease such as CMV retinitis; and transplantation related disorders such as renal transplant rejection. It is also used in vaccine therapies and immunization, including melanoma vaccines, HIV vaccines, malaria, or tuberculosis.

ADVANTAGE - The polynucleotide molecules in the inventive composition decrease the integration of polynucleotide into the chromosome(s) of the host organism; and decrease the development of anti-polynucleotide (or anti-DNA) antibodies which have been associated with diseases such as systemic lupus erythematosus.

Dwg.0/0

FS CPI

FA AB; DCN

MC CPI: A07-E03A3; A08-H04A; A11-W11; B04-C03; B04-E02; B04-E03; B04-E08; B04-F11; B12-M03; B12-M07; B14-A01B1; B14-A02; B14-A03B; B14-C09B; B14-D12A2; B14-E10C; B14-F01E; B14-F01G; B14-F03; B14-F06; B14-F07; **B14-G01**; **B14-G02C**; B14-H01; B14-J01E; B14-N01; B14-L06; B14-M01A; B14-N01; B14-N05; B14-N16; B14-N17C; B14-S03A; B14-S11; D05-H07; D05-H10A; D05-H12B; D05-H10E

TECH UPTX: 20020110

TECHNOLOGY FOCUS - POLYMERS - Preferred Component: The composition may

also include a polycation which is a polyamine polymer, an oligoamine, or an oligoamine conjugate. It also contains a mixture of block copolymers having first block copolymer component with oxyethylene content of at most 50, and a second block copolymer component with an oxyethylene content of at least 50. The weight ratio of second block copolymer to the first block copolymer is at least 5:1. The mixture comprises the block copolymer Pluronic F127 (RTM) or Pluronic L61 (RTM). The ratio of Pluronic F127 (RTM):Pluronic L61 (RTM) is 8:1. The Pluronic F127 (RTM) is 2% w/v and Pluronic L61 (RTM) is 0.025% w/v. Block copolymer(s) are of formula (I)-(V). The polycationic polymer is a cationic homopolymer, copolymer, or block copolymer comprising fragment(s) from aminoalkylene monomer(s), cationic amino acids, (-OPO(OH-R9NR11R11R12) OR8, or vinylpyridine or its derivative. The aminoalkylene monomer comprises a tertiary amine monomer of formula (VI), or a second amine monomer of formula R6(NHR7)R8 (VII). The composition also includes a polynucleotide and a polymer of segments. The polymers comprise polycationic segment which is cationic homopolymer, copolymer, or block copolymer, or their quaternary salt; or chain polyether segment(s) of 5-400 monomer units, or a homopolymer or copolymer of monomer(s) from acrylamide, glycerol, vinyl alcohol, vinyl pyrrolidine, vinylpyridine-N-oxide, oxazoline, morpholine acrylamide, or their derivatives. The polyether segment is a homopolymer of alkyleneoxy monomer OCnH2n', or a copolymer or block copolymer of the first alkyleneoxy monomer (preferably ethyleneoxy) and a second alkyleneoxy monomer of formula OCmH2m (preferably propyleneoxy of formula OCH(CH3)CH2. The polycationic polymer, at physiological pH comprises at least 6 cationic groups separated by 3-11 Angstrom. Each polyether segment has 5-400 monomeric units and the polycationic segment is a homopolymer, copolymer, or block copolymer of 2-100 of monomeric units of formula NHR0. The polycationic polymer is covalently linked with nonionic polymer segment(s).

x, y, z, i, j = 2-400;

R1, R2 = H or Me;

R'1, R4, R6, R9 = H, 2-8C alkyl, another monomer (I), or another monomer (II);

R'2, R8, R7 = alkanediyl of formula (CnH2n);

n = 2-8;

R0 = 1-12C straight chain aliphatic;

R9 = (CH2)nCH(R13);

n = 0-5;

R10-R12 = H, or 1-4C alkyl;

R13 = H, 3-8C cycloalkyl, or 1-20 alkyl;

n' = 2-3;

m = 2-4;

R0 = straight chain aliphatic of 2-6C which may be optionally substituted.

Preferred Form: The composition may be in a form of molecular solution or colloidal dispersion which is a suspension, emulsion, microemulsion, micelle, polymer complex, or other type of molecular aggregate.

Preferred Dimension: The colloidal dispersion comprises molecular species that are less than 300, preferably less than 50 nm.

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Component: The polynucleotide is ribonucleic acid (RNA), deoxyribonucleic acid (DNA), plasmid DNA, virus, or viral vector. It encodes a secreted or non-secreted protein, vaccine, or antigen. The composition may also contain a gene expressing a secreted or non-secreted protein, vaccine or antigen and gene(s) expressing an adjuvant **antigen presenting cells** and induce immune response for enhanced presentation.

ABEX

ADMINISTRATION - Administration is orally, topically, rectally, vaginally, parentally, intramuscularly, intradermally, subcutaneously, intraperitoneally, or intravenously (preferably by injection) for smooth, skeletal, or cardiac muscles. No dosage given.

EXAMPLE - A composition contained copolymer from Pluronic A, and

polycation from poly(N-ethyl-4-vinylpyridinium bromide) (pEVP-Br). A 10 microg/ml solution of rho beta-GAL (predominantly supercoiled) was prepared in a solution of PBS containing 10 mg/ml of Pluronic A and 45 microg/ml of pEVP-Br. These amounts were calculated to provide a ratio of polycation basic groups to plasmid phosphate groups of 10. The ratio of Pluronic A to DNA was 10:1. This stock was filter sterilized and a portion was diluted ten fold with serum-free Dulbecco's Modified Eagle's Medium (DMEM), so that the concentration of rho beta-GAL was 1 microg/ml. This solution was the Pluronic A transfecting medium.

L114 ANSWER 3 OF 4 WPIX (C) 2006 THOMSON DERWENT
AN 2001-381164 [37] WPIX
DNN N2001-284778 DNC C2001-113503
TI **Antigen**-binding fragments specific for stress protein-peptide complexes (SPPCs, associated with tumors and cancer associated SPPCs, useful for treating a range of cancers.
DC B04 D16 S03
IN DAN, M; ENTWISTLE, J; FAST, L; KAPLAN, H; LEWIS, F; MACDONALD, G; MAITI, P
PA (BIOS-N) BIOSPHARM SOCIETE INC
CYC 90
PI WO 2001040292 A1 20010607 (200137)* EN 170p C07K014-47
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
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AU 2001013703 A 20010611 (200134) C07K014-47
ADT WO 2001040292 A1 WO 1999-CA1141 19991129; AU 2001013703 A AU 2001-13703 19991129
FDT AU 2001013703 A Based on WO 2001040292
PRAI WO 1999-CA1141 19991129
IC ICM C07K014-47
ICS A61P035/00-385; C07K016-30; C12N015-10; G01N033-574
AB WO 200140292 A UPAB: 20010706
NOVELTY - Antigen-binding fragments specific for stress protein-peptide complexes (SPPCs) associated with tumors and cancer associated SPPCs, are new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:
(I) a composition (I) comprising an isolated stress protein-peptide complex (SPPC) capable of binding specifically to an anti-SPPC;
(II) a composition (II) comprising at least 1 isolated SPPC which is immunologically cross-reactive with a cancer cell surface associated SPPC;
(III) a composition (III) comprising the peptide portion of any isolated SPPC contained in (II);
(IV) a polynucleotide (IV) encoding the peptide of (III);
(V) a composition (V) comprising a purified SPPC corresponding to one of the SPPCs specifically recognized by H11 within a population of SPPCs derived from A-375 human melanoma cell line;
(VI) a process (VI) for creating an immunogen using the peptide portion of an SPPC by linking the peptide portion to a peptide coupling molecule;
(VII) an **antigen presenting cell** (VII) sensitized with the above composition;
(VIII) a composition (VIII) comprising an antigen binding fragment of an antibody which binds specifically to at least 1 (different) cancer-associated SPPC(s);
(IX) a cancer cell imaging composition (IX) comprising (VIII) bound to a detectable label;
(X) a method (X) of treating an individual with primary or metastasized cancer, comprising:
(a) sensitizing **antigen-presenting cells**

in vitro with (IX); and

(b) administering the sensitized **antigen presenting cells**;

(11) a composition (XI) comprising sensitized **antigen presenting cells** produced by (X);

(12) a method (XII) of selecting monoclonal antibodies (MAbs) directed against cancer associated SPPCs;

(13) a method (XIII) of generating cancer associated SPPCs;

(14) a population (XIV) of genetic packages with a genetically determined outer surface protein including those that collectively display a number of different potential immunoglobulin binding fragments in association with the outer surface protein, each package included a nucleic acid construct coding for a fusion protein or a portion of the outer surface protein and a variant of at least 1 parental anti-SPPC immunoglobulin binding fragment (a part of the construct includes a part of the CDR3 region of the VH chain which is randomized to create variation among the potential binding fragments, is biased in favor of encoding the amino acid constitution of a the parenteral immunoglobulin binding fragment);

(15) a composition (XV) comprising an antigen-binding fragment of an antibody specific for a cancer associated SPPC which elicits a cancer-associated immune response in a subject;

(16) a method (XVI) of treating a cancer patient comprising administering (XV);

(17) a method (XVII) of identifying antigen-binding fragments of an antibody specific for a tumor-associated SPPC;

(18) a method (XVIII) of isolating an antigenic tumor associated SPPC;

(19) a method (IXX) of isolating a peptide forming part of an antigenic tumor-associated peptide complex;

(20) a method (XX) of isolating an antigenically active tumor-associated protein-peptide complex;

(21) a composition (XXI) comprising an antigenic native SPPC which is immunologically cross-negative with an SPPC on the surface of cancer cells;

(22) cancer-associated antigen binding fragments (XXII) which react specifically with a T-antigen;

(23) an immunoaffinity matrix (XXXIII) to which an anti-SPPC is bound;

(24) a cancer associated anti-SPPC;

(25) a method of making an anti-SPPC by modifying a multi-carcinomic anti-SPPC or an anti-SPPC that binds to a number of SPPCs;

(26) a method of making an anti-SPPC by modifying an anti-SPPC that binds to the same target as H11 as determined by competitive inhibition assay;

(27) a monoclonal, polyclonal or phage library derived anti-SPPC that binds specifically to an isolated SPPC;

(28) a polynucleotide encoding an anti-SPPC; and

(29) a variant of H11 or E6 which binds specifically to an SPPC.

ACTIVITY - Cytostatic.

No suitable data given.

MECHANISM OF ACTION - Immunostimulation.

USE - The cancer-specific SPPC complexes are useful for initiating cancer-specific immunogenic responses against a variety of cancers.

The cancer cell-types are astrocytoma, fibrosarcoma, myxosarcoma, liposarcoma, oligodendroglioma, ependymoma, medulloblastoma, primitive neural ectodermal tumor (PNET), chondrosarcoma, osteogenic sarcoma, pancreatic ductal adenocarcinoma, small and large cell lung adenocarcinomas, chordoma, angiosarcoma, endotheliosarcoma, squamous cell carcinoma, bronchoalveolar carcinoma, epithelial adenocarcinoma, and liver metastases thereof, lymphangiosarcoma, lymphangioendotheliosarcoma, hepatoma, cholangiocarcinoma, synovioma, mesothelioma, Ewing's tumor, rhabdomyosarcoma, colon carcinoma, basal cell carcinoma, sweat gland

carcinoma, papillary carcinoma, sebaceous gland carcinoma, papillary adenocarcinoma, cystadenocarcinoma, medullary carcinoma, bronchogenic carcinoma, renal cell carcinoma, bile duct carcinoma, choriocarcinoma, seminoma, embryonal carcinoma, Wilms' tumor, testicular tumor, medulloblastoma, craniopharyngioma, ependymoma, pinealoma, hemangioblastoma, acoustic neuroma, oligodendroglioma, kidney adenocarcinoma, meningioma, neuroblastoma, retinoblastoma, leukemia, multiple myeloma, Waldenstrom's macroglobulinemia, and heavy chain disease, breast tumors such as ductal and lobular adenocarcinoma, squamous and adenocarcinomas of the uterine cervix, uterine and ovarian epithelial carcinomas, prostatic adenocarcinomas, transitional squamous cell carcinoma of the bladder, B and T cell lymphomas (nodular and diffuse) plasmacytoma, acute and chronic leukemias, malignant melanoma, glioblastoma, colon adenocarcinoma, small cell lung carcinoma, soft tissue sarcomas, ovary adenocarcinoma, ovarian adenocarcinoma, bladder cell carcinoma, prostate adenocarcinoma, larynx carcinoma and leiomyosarcomas claimed.

Dwg.6/11

FS PI BPI

FA AB; DCN

MC *PI: B04-B04C; B04-B04L; B04-C01; B04-E01; B14-F01; P04-G05; B04-G05C0E; B04-H10C0E; B11-C07A; B11-C07E; B11-F04A1; B12-F04E; B14-H01; B14-S11C; D03-A01A4; D05-A01B; D05-C11; D05-E07; D05-E08; D05-E09; D05-H10; D05-H11; D05-H12; D05-H13; D05-H18

BPI: S05-E14B4

TECH UPTX: 20010704

TECHNOLOGY FOCUS - BIOTECHNOLOGY - Preferred Compositions: In (I), the SPPC binds specifically to the surface of a stressed cell, especially a cancer cell. The SPPC is immunologically cross-reactive with a cancer cell surface associated SPPC. The stress protein of the SPPC belongs to either the HSP70 or HSP90 family. The stress protein is HSP72, HSP86 or HSP96. In (II), the anti-SPPC binds to at least 2 different cancers and binds specifically to a number of different SPPCs including SPPCs belonging to more than 1 family. The SPPC is immunologically cross-reactive with cancer cell surface associated SPPCs on at least 2 different cancers. The stress protein of the SPPC belongs to either the HSP70 or HSP90 family. The stress protein is HSP72 or HSP86. (II) Further comprises at least 1 other different SPPC which is immunogenically cross-reactive with a cancer associated SPPC. The additional SPPC is also capable of binding to the anti-SPPC. The stress proteins of the additional SPPCs belong to both of the HSP70 or HSP90 families. The SPPC is immunologically cross-reactive with more than 1 type of cancer cell population which is/are capable of exhibiting cell surface associated SPPCs.

The anti-SPPC is H11 or E6.

In (V) the SPPC belongs to the HSP70 or HSP90 family.

In (VIII) the antigen binding fragment of an antibody binds specifically to a number of different cancer cell types. The SPPCs belong to different families of stress proteins, especially those defined above. The antigen binding fragment and the target cancer cell are of human origin. The antigen binding fragment does not have an Fc portion for activating complement. The composition is free of synergistic cancer cell inhibiting or killing compounds.

(IX) Is used for imaging a cancer cell, especially a cell in a mammal. The anti-SPPC is linked to a group which assists in detecting specific binding of the anti-SPPC to a ligand. (IX) May also be used for treating or preventing cancers in mammals. (IX) Is especially for use with a number of cancer cell types that are capable of exhibiting SPPCs on the surface of the cell, especially carcinoma cells.

The antigen-binding fragment competitively binds to the same target as H11 or E6 as determined by competitive inhibition assay.

Preferred Processes: In (VI) the peptide portion is covalently associated with the peptide coupling molecule or non-covalently associated to a peptide presenting molecule. The peptide-coupling molecule is a heat-shock

protein.

L114 ANSWER 4 OF 4 WPIX (C) 2003 THOMSON DERWENT
AN 2000-038136 [61] WPIX
DNC C2000-012055
TI Inhibiting immune responses to selected antigens for treating immune mediated diseases, by incubating **antigen presenting cells** with compositions comprising factors secreted by **glioblastoma** cell lines.
DC B04 D16
IN CHOUCHET, C; COLIGAN, J E; SHEARER, G M; ZUO, J; ZOU, J
PA (USHE) US DEPT HEALTH & HUMAN SERVICES; (USHE) US NAT INST OF HEALTH
CYC 94
PI WO 2000063356 A2 20001026 (200061)* EN 83p A61K039-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
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AU 2000044195 A 20001102 (200115) A61P039-00
EP 1165101 A2 20020102 (200205) EN A61P039-14
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT SE SI
JP 2002542271 W 20021210 (200304) 89p A61P039-12
ADT WO 2000063356 A2 WO 2000-US9959 20000414; AU 2000044195 A AU 2000-44195 20000414; EP 1165101 A2 EP 2000-922633 20000414, WO 2000-US9959 20000414; JP 2002542271 W JP 2000-612571, WO 2000-US9959 20000414
FDT AU 2000044195 A Based on WO 2000063356; EP 1165101 A2 Based on WO 2000063356; JP 2002542271 W Based on WO 2000063356
PRAI **US 1999-125996P 19990324**
IC ICM A61P035-12; A61K035-14; A61P037-06
ICS A61P009-08; A61P009-10; A61P011-04; A61P011-00; A61P011-06; A61P025-00; A61P029-00; A61P031-00; A61P037-06
AB WO 2000063356 A UPAB: 20001117
NOVELTY - A method (I) for specifically inhibiting an immune response to selected antigens, comprising incubating **antigen presenting cells** (**APCs**) that present an antigen against which selective inhibition of an immune response is desired, with an immunosuppressive composition comprising factors secreted by a **glioblastoma** cell line (G), is new.
DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:
(1) a purified immunosuppressive composition (C) for the reduction of an immune response to one or more selected antigens, comprising one or more factors secreted by (G) having the following characteristics:
(a) incubation of the composition with **APCs** presenting an antigen, and subsequent exposure of the incubated **APCs** to T cells specific for the antigen, induces the T cells to undergo anergy or apoptosis;
(b) a molecular weight greater than 30 kDa;
(c) ability to bind to anion, but not cation exchange columns;
(d) maintain an ability to induce T cells to undergo anergy or apoptosis under the conditions of (a) within the pH range of 2-11, following heat exposure above 56 deg. C, and following immunoprecipitation of TGF (transforming growth factor)- beta 1, TGF- beta 2, TGF- beta 3, IL (interleukin)-6, calcitonin gene related peptide (CGRP) and macrophage colony stimulating factor (M-CSF) from the composition; and
(e) loses the ability to induce T cells to undergo anergy or apoptosis under the conditions of (a) following heat exposure above 65 deg. C, or after exposure to trypsin; and
(2) a preparation of (C) for suppressing an immune response to an antigen, by incubating a supernatant harvested from a (G) culture and the

antigen with an **APC**.

ACTIVITY - Neuroprotective; antirheumatic; antiarthritic; dermatological; immunosuppressive; antiinflammatory; antidiabetic.

MECHANISM OF ACTION - Inhibits immune response by inducing apoptosis and/or anergy in T cells specific for selected antigens (claimed).

Peripheral blood mononuclear cells (PBMC) from healthy individuals were stimulated with phytohemagglutinin (PHA) or with a mixture of influenza A virus (FLU), tetanus toxoid (TT) and candida (CASTA) in the absence or presence of **glioblastoma** culture supernatant (GCS generated by SMB-PG **glioblastoma** cell lines. The results indicated that GCS inhibited proliferative responses to both stimuli in a dose-dependent manner. GCS produced by the tumor cell line strongly inhibited T lymphocyte responses to a T cell antigen and to Th-dependent recall antigens that required intact **antigen presenting cells** (**APC**) function. As negative controls, culture supernatants from 5-7 tumor lines and two laboratory-generated Epstein Barr Virus (EBV)-transformed cell lines were taken which did not inhibit T cell proliferation or induce changes in IL-12 and IL-10 production when added to PBMC.

USE - (I) is useful for enhancing tolerance in a host mammal to an allogenic donor graft. The allogenic antigen is an antigen from the donor graft and the **APCs** are isolated from the organ, tissue, bone marrow of a mammal. (I) is also useful for enhancing tolerance in a host mammal to an autoantigen. (I) is useful as a medicament for treating immune mediated diseases (claimed) such as MS (multiple sclerosis), RA (rheumatoid arthritis), MG (myasthenia gravis), SLE (systemic lupus erythematosus) and IDDM (insulin dependent diabetes mellitus).

Dwg.0/3

FS CPI

FA AB; DCN

MC CPI: B04-B04C3; B04-F01; B04-F14; B04-H03G; B04-H14B; B04-H04F; B04-K01; B04-N02; B14-C03; B14-C06; B14-C09; **B14-G02**; B14-N17; **B14-S01**; B14-S04; D05-H07; D05-H08

TECH UPTX: 20001124

TECHNOLOGY FOCUS - BIOLOGY - Preferred Method: (I) further comprises introducing the **APCs** into a subject in need of a reduced immune response to the antigen to selectively inhibit the immune response of the subject to the antigen. In (I) **APCs** are obtained from a transplant donor and express a transplant antigen or present an autoantigenic antigen. (I) inhibits immune response by inducing apoptosis and/or anergy in T cells specific for the selected antigens. **APCs** are obtained from a donor other than a subject, and the selected antigens are donor-specific antigens present on an allogenic graft. The **APCs** are obtained from a donor of an allogenic graft and the selected antigen is an autoantigenic protein of an autoimmune disease. The **APCs** are isolated from a subject suffering from an autoimmune disease such as multiple sclerosis (MS), rheumatoid arthritis (RA), myasthenia gravis (MG), systemic lupus erythematosus (SLE), or insulin dependent diabetes mellitus (IDDM), and are repetitively exposed to one or more peptide fragments of the autoantigenic protein of the autoimmune disease. The autoantigenic protein is myelin basic protein (MBP), type II collagen, acetyl choline receptor (AcChoR), nuclear proteins, or pancreatic islet cell antigens. The **APCs** are monocytes isolated from the donor's or subject's blood, macrophages or dendritic cells.

Preferred Cell Line: **Glioblastoma** line is SMB 1, U251 A172, A1207, A1126, A2781, U87 MG, U138 MG or U373 MG.

Preferred Composition: The incubation of (C) with an effective amount of monocytes, dendrites and B cells causes decreased expression of Major histocompatibility complex (MHC) class II antigens and CD 80,86 on the surface of the monocytes and the dendrites, but no effect on the expression of MHC class II antigens and CD 80,86 on the B cells, increased expression of IL-10 in monocytes and dendrites, and decreased expression of IL-12 in monocytes and dendrites.

Preparation: (P) comprises combining (C) with a pharmaceutical carrier. **APC** is purified to produce a pure **APC** composition prior to or after incubating with the B-culture supernatant.

ABEX

ADMINISTRATION - **APCs** are administered by intravenous, subcutaneous, intramuscular or intraperitoneal routes (claimed) at a dose of 30x10 power 6 to 60x10 power 6 cells.

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FILE LAST UPDATED: 29 JAN 2003 <20030129/UP>
PATENT CITATION INDEX, COVERS 1972 TO DATE

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L115 ANSWER 1 OF 1 HPCI (C) 2003 THOMSON DERWENT
AN 2000-638246 [61] HPCI
DNC C2000-191055
TI Inhibiting immune responses to selected antigens for treating immune mediated diseases, by incubating antigen presenting cells with composition comprising factors secreted by glioblastoma cell line.
DC B04 D16
IN CHOCHOLET, D; COLLIGAN, J E; SHRAPER, G N; ZOU, J; ZOU, J
PA (USSH) US DEPT HEALTH & HUMAN SERVICES; (USSH) US NAT INST OF HEALTH
CYC 64
PI WO 200056356 A2 20000928 (200061)* EN 69p A61K039-00
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ TZ UG ZW
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AU 200040295 A 20001009 (200061)* A61P039-00
EP 1165101 A2 20020102 (200206)* EN A61P035-14
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT PL RO SI
JP 2002540171 W 20021126 (200303) 69p A61P035-12
ADT WO 200056356 A2 WO 2000-US7959 20000323; AU 2000040295 A AU 2000-40295 20000323; EP 1165101 A2 EP 2000-919939 20000323, WO 2000-US7959 20000323; JP 2002540171 W JP 2000-606266 20000323, WO 2000-US7959 20000323
FDT AU 2000040295 A Based on WO 200056356; EP 1165101 A2 Based on WO 200056356; JP 2002540171 W Based on WO 200056356
PRAI **US 1999-125996P 19990324**
IC ICM A61K035-12; A61P035-14; A61P039-00
ICS A61K039-04; A61P003-10; A61P019-02; A61P021-00; A61P021-04; A61P025-00; A61P029-00; A61P037-02; A61P037-06
FS CPI

CTCS CITATION COUNTERS

PNC.DI	0	Cited Patents Count (by inventor)
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PNC.CX	0	Citing Patents Count (by examiner)

IAC.GI 0 Citing Issuing Authority Count (by inventor)
IAC.GX 0 Citing Issuing Authority Count (by examiner)

CRC.I 0 Cited Literature References Count (by inventor)
CRC.X 2 Cited Literature References Count (by examiner)

CDP CITED PATENTS UPD: 20011129

Cited by Examiner

CITING PATENT	CAT	CITED PATENT	ACCNO
WO 200056356 A	X	EP 1594 3 A	1995-238027'30
	PA:	(FONT-I) FONTANA A; (SANO) SANDOZ LTD	
	IN:	FONTANA, A	
	X	EP 15[illegible] A	1995-263190'42
	PA:	(SANO) SANDOZ PATENT GMBH; (SANO) SANDOZ AG; (SANO) SANDOZ LTD	
	IN:	FONTANA, A	

REN LITERATURE CITATIONS UPD: 20011129

Citations by Examiner

CITING PATENT	CAT	CITED LITERATURE
WO 200056356 A		JIANG-PING ZOU ET AL.: "Human Glioma-Induced Immunosuppression Involves Soluble Factor(s) That Alters Monocyte Cytokine Profile and Surface Markers" JOURNAL OF IMMUNOLOGY., vol. 162, 1999, pages 4:33-4[illegible], XP[illegible] THE WILLIAMS AND WILKINS CO. BALTIMORE., US ISSN: 0022-1767
WO 200056356 A		JOEFF A. MCFORD ET AL. : "Apoptotic elimination of peripheral T lymphocytes in patients with primary intracranial tumors" JOURNAL OF NEUROSURGERY., vol. 91, no. 6, December 1999 (1999-12), pages [illegible], XP000952674 XX, XX ISSN: 0022-3085

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FILE LAST UPDATED: 27 JAN 03 <20030129/UP>
MOST RECENT DERWENT UPDATE: 200307 <20030731/DW>
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/BIX is also provided which comprises both /BI and /ABEX <<<

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http://www.derwent.com/userguides/dwpi_guide.html <<<

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L118 ANSWER 1 OF 2 WPIX (C) 2003 THOMSON DERWENT
AN 1985-[illegible] [42] WPIX
CR 1985-[illegible] [39]
DNC [illegible]1985-114[illegible]
TI New immunosuppressant factors from human glioblastoma cells - useful for inhibiting interleukin-2 dependent T-cell mechanisms or with interleukin-1 like activity.
DC [illegible]
IN FONTANA, A
PA (SANO) SANDOZ PATENT GMBH; (SANO) SANDOZ AG; (SANO) SANDOZ LTD
CYC 16
PI WO 8504421 A 19851010 (198542)* EN 39p
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EP 159289 A 19851023 (198543) EN <--
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AU 8541[illegible] A [illegible] [illegible]
JP 61501514 W 19860724 [illegible]
DK 850[illegible] A 1985112[illegible] [illegible]
[illegible] A [illegible] [illegible]
EP 159289 B [illegible] [illegible] EN <--
R: AT BE CH DE FR GB IT LI LU NL SE
DE 3585[illegible] G 1990611[illegible] [illegible] C12P021-0[illegible]
JP [illegible] B2 1994101[illegible] [illegible] 15p C07K015-04
DK 171600 B 1997021[illegible] [illegible] C07K014-47
FR [illegible] A 1994051[illegible] [illegible] C12P021-0[illegible]
ADT WO 8504421 A WO 1985-EP107 19850316; EP 159289 A EP 1985-810114 19850315; JP 61501514 W JP 1985-501675 19850316; EP 159289 B EP 1985-810114 19850315; DE 3585968 G DE 1985-3585968 19850315, EP 1985-810114 19850315; JP [illegible] B2 JP 1985-501675 19850316, WO 1985-EP107 19850316; DK 171600 B WO 1985-EP107 19850316, DK 1985-5392 19851121; PH 2824[illegible] A PH 1985-31957 1985[illegible]
FDT DE 3585968 G Based on EP 159289; JP 06080080 B2 Based on JP 61501514, Based on WO 8504421; DK 171600 B Previous Publ. DK 8505392
PRAI GB 1984-[illegible] 19841128; EP 1985-810114 19850315
REP [illegible]
IC ICM C07K014-47; C07K015-04; C12P021-00
ICS A61K035-1[illegible]; A61K037-02; C07K001-36; C07K003-00; C12N001-19; C12R001-91
ICI C12P021-00, C12R001:91
AB WO 8504421 A UPAB: 19970403
Immunosuppressant factor (I) derived from human glioblastoma cells and inhibiting interleukin-2 (IL-2) dependent T-cell mechanisms is new. (2) Immunosuppressant factor (II) derived from human glioblastoma cells and showing interleukin-1 (IL-1) like activity and having a molecular wt. of about 22,000 is new.
Pref. (I) has a molecular wt of about 97000 daltons. It is sensitive

to tryptic proteolysis; it inhibits the incorporation of tritiated-Tdr into murine thymocytes stimulated with ConA or PHA in presence of IL-2;and it has an isoelectric point of pH 4.6 (on flatbed isoelectric focussing).

USE/ADVANTAGE - (I) inhibits the IL-2 effect on thymocytes in the presence of lectins and on the induction of alloreactive cytotoxic T-cells in mixed lymphocyte cultures, and it inhibits the growth of neuroblasts but not fibroblasts. It also inhibits the lectin response of human peripheral blood mononuclear cells. (II) enhances the PHA-induced thymocyte proliferation, it has no IL-2 activity and it augments IL-2 prodn. by mitogen-stimulated spleen cells. (I) and (II) are released in vivo and invitro from the glioblastoma cells and are effective against non-lymphoid tumours.

Dwg.1/1

FS CPI

FA AB

MC CPI: B04-B04J; B12-D02; B12-G01; B12-G07; D05-C; D05-H07

ABEQ DE [illegible] UPAB: 19960905

(1) Immunosuppressant factor (I) derived from human glioblastoma cells is new when it inhibits interleukin 2 (IL-2) dependent T-cell mechanism and has a molecular wt. of about 9700. (2) Factor (II) for inhibition of neuroblast growth and having a molecular wt. of about 7,000 is new. (3) Interleukin 1 (IL-1) like factor (III) derived from human glioblastoma cells and having a molecular wt. of about 22000 is new. (4) Supernatant harvested from cultured human glioblastoma cells conte. a factor (I) and/or (II) and/or (III) is new.

USE/ADVANTAGE - (I) has an inhibitory effect on IL-2 dependent T-cell mechanisms and inhibits IL-2 induced proliferation of T-cell clones and the induction of alloreactive cytotoxic T-cells in mixed lymphocyte cultures. It also inhibits the growth of neuroblasts but not of fibroblasts.

(II) promotes morphological differentiation of Neuro 2A cells. (III) is an IL-1 like mediator, as it enhances PHA-induced thymocyte proliferation and it has no IL-2 activity but augments IL-2 prodn. by M-stimulated spleen cells.

ABEQ EP [illegible] B UPAB: 19960905

An immunosuppressant factor isolated from human glioblastoma cells which; (aa) inhibits the incorporation of tritiated thymidine into murine thymocytes stimulated with Con-canavalin A or phytohaemaglutinin in the presence of IL-2; (bb) inhibits the proliferation of IL-2 dependent T cell clones; (cc) suppresses the growth of neuroblasts but not fibroblasts; (dd) inhibits the generation of cytotoxic T cells in the allogenic mixed lymphocyte reaction; (ee) inhibits the proliferation of hapten-specific cytotoxic T cells in the presence of haptenated stimulator; (ff) inhibits the proliferative response of thymocytes to concanavalin A and (hh) is sensitive to tryptic proteolysis.

L118 ANSWER 1 OF 1 WPIX (C) 2003 THOMSON DERWENT

AN [illegible] [34] WPIX

CR [illegible] [42]

DNC C1995-103016

TI New factors obtd. by cultivating human glioblastoma cells - include immunosuppressant, neuroblast growth inhibitor and interleukin-1 like factor.

DC B04 D16

IN FONTANA, A

PA (NOVS) NOVARTIS AG; FONT-I FONTANA A; (SANO) SANDOZ LTD

CYC 5

PI EP [illegible] A 19950920 199[illegible] * EN 30p <--

R: DE LI

ZA 9501104 A 19951128 [illegible]

US 5595905 A 19970121 (199713) 18p

PH 28243 A 19940512 (199808) C12P021-00

CA 1341401 C 20021126 (200305) EN A61K035-12

ADT EP 155433 A EP 1984-810140 19840323; ZA 8502194 A ZA 1985-2194 19850322; US 5095095 A US 1990-553096 19900713; PH 24249 A PH 1985-31857 19850307; CA 1 414011 C CA 1985-476106 19[illegible]09

PRAI EP 1984-810140 19840323; US 1990-553096 19900713; US 1984-598601 1984[illegible]13; US 1987-300369 19[illegible]111

REP 4-Dn1.Bn1

IC A61K 7-02; C07K003-00; C07K014-00; C12P021-00; C12R001-00

ICM A61K038-12; C12P021-00

ICS A61K 7-02; A61K038-16; C[illegible]K 03-00; C[illegible]K13-00; C12N005-00; C12R001-91

AB EP 155433 A UPAB: 2010-01-11

(I) Immunosuppressant factor (I) derived from human glioblastoma cells is new when it inhibits interleukin 2 (IL-2) dependent T-cell mechanism and has a molecular wt. of about 3[illegible]00. (2) Factor (II) for inhibition of neuroblast growth and having a molecular wt. of about 7[illegible]00 is new. (3) Interleukin 1 (IL-1) like factor (III) derived from human glioblastoma cells and having a molecular wt. of about [illegible]500 is new. 4 Supernatant harvested from cultured human glioblastoma cells contg. a factor (I and/or (II) and/or (III) is new.

USE ADVANTAGE - (I) has an inhibitory effect on IL-2 dependent T-cell mechanisms and inhibits IL-2 induced proliferation of T-cell clones and the induction of alloreactive cytotoxic T-cells in mixed lymphocyte cultures. It also inhibits the growth of neuroblasts but not of fibroblasts.

(II) promotes morphological differentiation of Neuro 2A cells. (III) is an IL-1 like mediator, as it enhances PHA-induced thymocyte proliferation and it has no IL-2 activity but augments IL-2 prodn. by B-stimulated spleen cells.

Dwg.0/0

Dwg.2/3

FS CPI

FA AB

MC CPI: B04-B04A; B12-D02; D05-B

ABEQ EP 155433 B UPAB: 19900905

(I) Immunosuppressant factor (I) derived from human glioblastoma cells is new when it inhibits interleukin 2 (IL-2) dependent T-cell mechanism and has a molecular wt. of about 3[illegible]00. (2) Factor (II) for inhibition of neuroblast growth and having a molecular wt. of about 7[illegible]00 is new. (3) Interleukin 1 (IL-1) like factor (III) derived from human glioblastoma cells and having a molecular wt. of about [illegible]500 is new. 4 Supernatant harvested from cultured human glioblastoma cells contg. a factor (I and/or (II) and/or (III) is new.

USE/ADVANTAGE - (I) has an inhibitory effect on IL-2 dependent T-cell mechanisms and inhibits IL-2 induced proliferation of T-cell clones and the induction of alloreactive cytotoxic T-cells in mixed lymphocyte cultures. It also inhibits the growth of neuroblasts but not of fibroblasts.

(II) promotes morphological differentiation of Neuro 2A cells. (III) is an IL-1 like mediator, as it enhances PHA-induced thymocyte proliferation and it has no IL-2 activity but augments IL-2 prodn. by B-stimulated spleen cells.

ABEQ US [illegible]095095 A UPAB: 19920305

Immunosuppressant factor compsn. is characterised by (a) inhibiting the incorporation of tritiated thymidine into murine thymocytes stimulated with Concanavalin A or phytohaemagglutinin in the presence of IL-2; (b) inhibiting proliferation of IL-2 dependent T-cell clones; (c) suppressing the growth of neuroblastoma but not fibroblasts; (d) inhibiting the generation of cytotoxic T cell. in the allogenic mixed lymphocyte reaction; (e) inhibiting the proliferation of hapten-specific cytotoxic T cells in the presence of haptenated stimulator; (f) inhibiting the proliferative response of thymocytes to concanavalin A; and (g) having a specific activity of at least 70,000 units/mg in the concanavalin A/thymocyte assay.

USE/ADVANTAGE - Factor is derived from human glioblastoma cells and inhibits the lectin response of human peripheral blood, mononuclear cells isolated from blood donors. Prevents transplant rejection and treats auto-immune diseases.
1/1

=> fil medline
FILE 'MEDLINE' ENTERED AT 15:39:55 ON 31 JAN 2003

FILE LAST UPDATED: 30 JAN 2003 (20030130/UP). FILE COVERS 1958 TO DATE.

On June 9, 2002, MEDLINE was reloaded. See HELP RLOAD for details.

MEDLINE thesauri in the /CN, /CT, and /NN fields incorporate the MeSH 2003 vocabulary. See http://www.nlm.nih.gov/mesh/summ2003.html for a description of changes.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all tot

L127 ANSWER 1 OF 2 MEDLINE
AN 2000049533 MEDLINE
DN 20049533 PubMed ID: 10584803
TI Apoptotic elimination of peripheral T lymphocytes in patients with primary intracranial tumors.
AU **Morford L A;** Dix A R; Brooks W E; Koszman T L
CS Department of Microbiology and Immunology, University of Kentucky Medical Center, Lexington 40536-0084, USA.
SO **JOURNAL OF NEUROSURGERY, (1999 Dec)** 91 (6) **935-46.**
Journal code: 0253357. ISSN: 0022-3085.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199912
ED Entered STN: 20000113
Last Updated on STN: 20000113
Entered Medline: 19991213
AB OBJECT: Patients with gliomas exhibit severe T lymphopenia during the course of the disease. This study was conducted to determine the mechanism(s) responsible for the lymphopenia. METHODS: Using two-color fluorescent staining techniques, the authors show that significant numbers of T cells undergo apoptosis in the peripheral blood of patients with gliomas. To determine whether a glioma-derived factor(s) induces this apoptosis, rosette-purified T cells obtained from healthy donors were treated with glioma cell culture supernatant (GCCS) and examined for apoptosis. It is demonstrated that treatment of normal T cells with GCCS induced apoptosis only with concurrent stimulation of the T-cell receptor/CD3 complex. The addition of neutralizing antibodies to interleukin (IL)-10, IL-4, transforming growth factor alpha, or tumor necrosis factor-beta (lymphotoxin) did not rescue these T cells from apoptosis. Experiments were also conducted in which the degree of monocyte involvement in the induction of T-cell apoptosis was explored. The U937 cells were pretreated for 20 hours with a 1:20 dilution of GCCS. After the removal of GCCS, the U937 cells were cultured in transwell assays with stimulated T cells. Although control U937 cells did not induce apoptosis of the activated T cells, GCCS-pretreated U937 cells induced appreciable apoptosis in normal, stimulated T-cell cultures. CONCLUSIONS: These data indicate that one mechanism by which gliomas cause immunosuppressive

effects is the induction of monocytes to release soluble factors that promote activated T-cell apoptosis. The loss of activated T cells leads to T lymphopenia and contributes to the deficiencies in cell-mediated immunity that have been observed during testing of glioma patients' immune function.

CT Check Tags: Female; Human; Male; Support, Non-U.S. Gov't
Adult
Aged
*Apoptosis: PH, physiology
*Brain Neoplasms: IM, immunology
Cytokines: PH, physiology
Flow Cytometry
Glioblastoma: IM, immunology
*Glioma: IM, immunology
Immune Tolerance: IM, immunology
Lymphocyte Transformation: IM, immunology
*Lymphopenia: IM, immunology
Middle Age
Monocytes: IM, immunology
*T-Lymphocytes: IM, immunology
0 (T-Cell Cells: IM, immunology
CN 0 (Cytokines)

L27 ANSWER 2 OF 2 MEDLINE
AN 1999165911 MEDLINE
DN 99165911 PubMed ID: 10202063
TI Human glioma-induced immunosuppression involves soluble factor(s) that alters monocyte cytokine profile and surface markers.
AU **Zou J P**; Morford L A; Chougnet C; Dix A R; Brooks A G; Torres N; Shurman J D; Colligan J E; Brooks W H; Roszman T L; Shearer G M
CS Experimental Immunology Branch, National Cancer Institute, National Institutes of Health, Bethesda, MD 20892, USA.
SO **JOURNAL OF IMMUNOLOGY**, (1999 Apr 15) 162 (8) **4882-92**.
Journal code: 2985117R. ISSN: 0022-1767.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Abridged Index Medicus Journals; Priority Journals
EM 199905
ED Entered STN: 19990517
Last Updated on STN: 19990517
Entered Medline: 19990506
AB Patients with gliomas exhibit deficient in vitro and in vivo T cell immune activity, and human glioblastoma culture supernatants (GCS) inhibit in vitro T lymphocyte responses. Because APC are essential for initiating and regulating T cell responses, we investigated whether GCS would affect cytokines produced by monocytes and T cells from healthy donors of PBMC. Incubation of PBMC with GCS decreased production of IL-12, IFN-gamma, and TNF-alpha, and increased production of IL-6 and IL-10. The GCS-induced changes in IL-12 and IL-10 occurred in monocytes, and involved changes in IL-12 p40 and IL-10 mRNA expression. Incubation with GCS also resulted in reduced expression of MHC class II and of CD80,86 costimulatory molecules on monocytes. The immunosuppressive effects were not the result of IL-6 or TGF-beta1 that was detected in GCS. However, it was due to a factor(s) that is resistant to pH extremes, differentially susceptible to temperature, susceptible to trypsin, and has a minimum molecular mass of 40 kDa. Our findings show that glioblastoma-generated factors that are known to suppress T cell responses alter the cytokine profiles of monocytic APC that, in turn, inhibit T cell function. This model indicates that monocytes can serve as an intermediate between tumor-generated immune-suppressive factors and the T cell responses that are suppressed in gliomas.
CT Check Tags: Human, Support, U.S. Gov't, P.H.S.

Antibodies, Monoclonal: PD, pharmacology
Antigens, CD: BI, biosynthesis
Antigens, CD: IM, immunology
Antigens, CD80: BI, biosynthesis
Antigens, CD80: IM, immunology
*Antigens, Surface: BI, biosynthesis
Cell-Free System: CH, chemistry
Cell-Free System: IM, immunology
Cytokines: AI, antagonists & inhibitors
*Cytokines: BI, biosynthesis
Glioblastoma
*Glioma: CH, chemistry
*Glioma: IM, immunology
Glioma: ME, metabolism
Histocompatibility Antigens Class I: BI, biosynthesis
Histocompatibility Antigens Class I: IM, immunology
Interferon-gamma, Recombinant: PD, pharmacology
Interleukin-10: AI, antagonists & inhibitors
Interleukin-10: BI, biosynthesis
Interleukin-10: GE, genetics
Interleukin-10: IM, immunology
Interleukin-12: AI, antagonists & inhibitors
Interleukin-12: BI, biosynthesis
Interleukin-12: GE, genetics
Leukocytes, Mononuclear: IM, immunology
Leukocytes, Mononuclear: ME, metabolism
Lymphocyte Transformation: IM, immunology
Membrane Glycoproteins: BI, biosynthesis
Membrane Glycoproteins: IM, immunology
Monocytes: IM, immunology
*Monocytes: ME, metabolism
RNA, Messenger: BI, biosynthesis
Receptors, Interleukin: IM, immunology
Staphylococcus aureus: IM, immunology
Suppressor Factors, Immunologic: CH, chemistry
*Suppressor Factors, Immunologic: PH, physiology
T-Lymphocytes: IM, immunology
Tumor Cells, Cultured
RN 130068-27-8 (Interleukin-10 ; 187348-17-0 (Interleukin-12)
CN 0 (Antibodies, Monoclonal); 0 (Antigens, CD); 0 (Antigens, CD80); 0 (Antigens, Surface); 0 (B7-1 protein); 0 (Cytokines); 0 (Histocompatibility Antigens Class I); 0 (Interferon-gamma, Recombinant); 0 (Membrane Glycoproteins); 0 (RNA, Messenger); 0 (Receptors, Interleukin); 0 (Suppressor Factors, Immunologic); 0 (interleukin-10 receptor)

=> d his

(FILE 'HOME' ENTERED AT 14:26:15 ON 31 JAN 2003)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 14:28:31 ON 31 JAN 2003
E GLIOBLASTOM/CT
E E1+ALL
L1 2[illegible]0 S E2
L2 48 S E6
L3 2[illegible]0 S L1,L2
E GLIOBLAST
L4 4[illegible]8 S E1-E14
L5 4[illegible]28 S L3,L4
E APOPTOSIS/CT
E E3+ALL

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L6       46731 S E5,E4
               E E3+ALL
L7        9835 S E3,E4,E6,E7
               E APOPTO
L8       63[illegible]1 S E2[illegible]-E[illegible]4
L9       24[illegible] S E3[illegible]-E[illegible]9
L10          1 S E6[illegible]
L11    [illegible] S L[illegible] AND L6-L10
               E [illegible]
L12    [illegible] S E[illegible]
L13    [illegible] S [illegible]
L14    [illegible] S L1[illegible],L1[illegible]
L15     41[illegible] S L14,L[illegible]
L16      42[illegible] S L15 AND L6-L10
L17      42[illegible] S L11,L16
L18      42[illegible] S L[illegible],L14 AND ?APOPTO?
L19      4[illegible]7 S L1[illegible],L18
               E MULTIPLE SCLEROSIS/CT
               E E[illegible]+ALL
L20       6[illegible]57 S E[illegible]
L21      [illegible] S E[illegible]-E5[illegible]BI
L22    [illegible] S L2[illegible],L21 AND L1[illegible]
               E MYELIN BASIC PROTEIN/CT
               E E[illegible]+ALL
L23      3[illegible] S E[illegible],E1[illegible],E[illegible]+NT
L24      5[illegible] S E[illegible],E1[illegible]-E1[illegible]/BI
L25       5[illegible]5 S MYELIN BASIC PROTEIN
L26    [illegible] S L2[illegible]-L2[illegible] AND L15
L27    [illegible] S MBP AND L15
               E MONOCYTE/CT
               E E[illegible]+ALL
L28      [illegible] S E1
               E E[illegible]+ALL
L29     1914[illegible] S E[illegible]
L30     [illegible] S L2[illegible],L2[illegible] AND L15
L31    [illegible] S L1[illegible] AND L2[illegible],L26,L27,L30
               E SHFAREK G AU
L32      [illegible] S E[illegible],E[illegible],E11,E12
               E COLIGAN J AU
L33      [illegible]4 S E4-E7
               E COUGHNET C/AU
               E CHOU J/AU
L34      [illegible] S E[illegible],E1[illegible]
               E CHOU JIAN/AU
L35      [illegible]4[illegible] S E[illegible],E[illegible]4
               E CHOU JIANHING/AU
L36      1[illegible] S E1-E[illegible]
               E CHOUGNET C/AU
L37    [illegible] S E[illegible]-E[illegible],E1
               E [illegible] AU
L38    [illegible] S E[illegible],E[illegible]
               E [illegible] JIAN/AU
L39      [illegible]4 S E[illegible]
L40      6[illegible] S E1[illegible]
L41        17 S E39,E40
L42    [illegible] S L[illegible]-L41
L43    [illegible] S L42 AND L15
               E ANTIGEN-PRESENT/CT
               E E[illegible]+ALL
L44    [illegible] S E[illegible]
L45     7[illegible] S E[illegible]+NT
L46      7644 S ANTIGEN? PRESENT? CELL
L47        10 S L[illegible] AND L44-L46
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L49          13 S L5 AND ANTIGEN? PRESENT?
L49          2  S L47,L48
L50          1  S L14 AND L44-L46
L51          0  S L14 AND ANTIGEN? PRESENT?
L52          14 S L15 AND APC
L53          29 S L44,L52
L54          15 S L5 AND IMMUN?(L)RESPON?
L55          10 S L53,L54 AND L6-L10,L20,L21,L23-L25,L28,L29
                SEL DN AN 1 5 6 9 10
L56           9 S E1-E11
L57          15 S L53,L54 NOT L55
                SEL DN AN 8 12 13 16 23 24
L58           0 S L57 AND E1-E10
L59          11 S L43,L56,L58
                E TRANSPLANTATION/CT
                E E3+ALL
L60         285 S E1,E2
L61          30 S E4
L62        2618 S E5
                E TRANSPLANT/CT
L63         444 S E6
                E E3+ALL
L64       29930 S E7-E12,E6+NT
L65        4587 S E6+NT
                E TRANSPLANT,/CT
L66         444 S E4
L67          56 S L15 AND L60-L66
L68         148 S L15 AND (TRANSPLANT? OR GRAFT?)
L69           4 S L67,L68 AND L44-L46
                SEL AN 2 3
L70           7 S E1-E4
L71          12 S L53,L70 AND L1-L70
L72          28 S L15 AND L44-L46
L73           3 S L72 AND L60-L66
L74           9 S L72 AND (TRANSPLANT? OR GRAFT? OR DONOR?)
L75          11 S L73,L74,L71
L76          19 S L72 NOT L71

     FILE 'HCAPLUS' ENTERED AT 15:04:55 ON 31 JAN 2003
L77          94 S L15 AND A61K039/00,C,CM,CS
L78           4 S L77 AND L44-L46
L79           1 S L77 AND APC
L80           3 S L77 AND (ANTIGEN? (L) PRESENT?
L81           4 S L78-L80
L82           3 S L81 NOT L77

     FILE 'BIOSIS' ENTERED AT 15:09:58 ON 31 JAN 2003
                E SHEARER G/AU
L83         487 S E5,E9
L84         141 S E14,E15
                E CHO J/AU
L85          41 S E5
                E CHO JIAN/AU
L86           7 S E7
                E COLIGAN J/AU
L87         410 S E5-E6
                E CHOGNET C/AU
L88           0 S E3-E6
                E ZHOU J/AU
L89         616 S E3,E17
                E ZHOU JIAN/AU
L90         122 S E3
L91          11 S E19
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                E ZHOU JIANPING/AU
L92           13 S E3,E4,E2
L93         1910 S L2?-L92
                E GLIOBAS
L94          218 S E1-E11
L95         7464 S E3-E14
L96            7 S E13-E17,E29
L97            8 S L48 AND L94-L96
L98            2 S L47 AND (MONOCYTE OR GLIOMA?)/TI
L99           10 DUP REM L?? L93  (0 DUPLICATES REMOVED)

      FILE 'BIOSIS' ENTERED AT 15:15:51 ON 31 JAN 2003
L100          61 S ZHOU J AU OR ZHOU J P/AU
L101           2 S L100 AND L94,L95
L102           2 S L48,L101

      FILE 'WPIX' ENTERED AT 15:16:38 ON 31 JAN 2003
                E U2?4-U2?96/AP,PRN
L103           1 S E5
                E GLIOB
L104          52 S E4-E12
L105          51 S (GLIOBLAST
L106          51 S L105 BIX
L107          51 S L104-L106
L108           6 S L107 AND (APC OR ANTIGEN? PRE.ENT? CELL?)/BIX
L109           1 S L106 AND A61P?/IC,ICM,ICS,ICA,ICI
L110           3 S L106 AND (B14-J01 OR C14-S01 OR B12-E01 OR C12-E01 OR B14-G?
L111           3 S L106 NOT L103,L109,L110
L112           1 S L111 AND ANTIGEN?/TI
L113           4 S L110,L112

      FILE 'WPIX' ENTERED AT 15:20:26 ON 31 JAN 2003
L114           4 S L102,L113

      FILE 'DPCI' ENTERED AT 15:20:54 ON 31 JAN 2003
                E U??0-U??96/AP,PRN
L115           1 S E5

      FILE 'DPCI' ENTERED AT 15:21:17 ON 31 JAN 2003

      FILE 'WPIX' ENTERED AT 15:21:36 ON 31 JAN 2003
                E EP1??4??/PN
L116           1 S E3
                E EP1??1?8/PN
                E EP1??1?9/PN
L117           1 S E3
L118           2 S L116,L117

      FILE 'WPIX' ENTERED AT 15:??:42 ON 31 JAN 2003

      FILE 'MEDLINE' ENTERED AT 15:??:11 ON 31 JAN 2003

      FILE 'HCAPLUS' ENTERED AT 15:??:18 ON 31 JAN 2003
                E JOURNAL OF NEUROSURGERY/JT
L119           0 S E3 AND LOPRI?/AU
L120           3 S E3 AND 1???/PY
L121           0 S ???,SO AND L120

      FILE 'BIOSIS' ENTERED AT 15:??:23 ON 31 JAN 2003
                E JOURNAL OF NEUROSURGERY/JT

      FILE 'MEDLINE' ENTERED AT 15:??:41 ON 31 JAN 2003
                E JOURNAL OF NEUROSURGERY/JT
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                E JOURNAL OF NEUROSURGERY/JT
L122           17 S E3 AND 935/SO
L123            2 S L122 AND 1999/FY
L124            1 S L123 AND MORFORD ?/AU
                E JOURNAL OF IMMUNOLOGY/JT
L125           16 S E3 AND (ZOU J? OR ZHOU J?)/AU
L126            1 S 4882/SO AND L125
L127            2 S L124,L126

     FILE 'MEDLINE' ENTERED AT 15:39:55 ON 31 JAN 2003
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